Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

92 R

UNITED STATES DEPARTMENT OF AGRICULTURE
EXTENSION SERVICE

WASHINGTON, D. C. ISSUED, MAY, 1932

Report of Extension Work in Agriculture and Home Economics in the United States 1931

1
Ex892R
JUL 21 1932
LIBRARY
BUREAU OF
AGRICULTURAL ECONOMICS
U. S. DEPARTMENT OF AGRICULTURE

This report supersedes the annual reports entitled "Report of the Director of the Extension Service" last issued for the fiscal year 1930, and "Cooperative Extension Work" last issued for the calendar year 1929

For sale by the Superintendent of Documents, Washington, D. C.

DEPARTMENT OFFICIALS IN CHARGE OF COOPERATIVE EXTENSION WORK

EXTENSION SERVICE

C. W. WARBURTON, Director

C. B. SMITH, Assistant Director

STATE DIRECTORS IN CHARGE OF COOPERATIVE EXTENSION WORK [1]

ALABAMA.—L. N. Duncan, Alabama Polytechnic Institute, Auburn.
ARIZONA.—P. H. Ross, College of Agriculture, University of Arizona, Tucson.
ARKANSAS.—Dan T. Gray, director, College of Agriculture, University of Arkansas, Fayetteville.
T. R. Reid, assistant director, 310 Federal Bank and Trust Building, Little Rock.
CALIFORNIA.—B. H. Crocheron, College of Agriculture, University of California, Berkeley.
COLORADO.—F. A. Anderson, director, State Agricultural College of Colorado, Fort Collins.
CONNECTICUT.—B. W. Ellis, Connecticut Agricultural College, Storrs.
DELAWARE.—C. A. McCue, University of Delaware, Newark.
FLORIDA.—Wilmon Newell, Agricultural Extension Service, Experiment Station, Gainesville.
GEORGIA.—J. Phil Campbell, Georgia State College of Agriculture, Athens.
HAWAII.—F. G. Krauss, University of Hawaii, Honolulu.
IDAHO.—E. J. Iddings, College of Agriculture, University of Idaho, Moscow.
ILLINOIS.—H. W. Mumford, College of Agriculture, University of Illinois, Urbana.
INDIANA.—J. H. Skinner, Purdue University, La Fayette.
IOWA.—R. K. Bliss, Iowa State College of Agriculture and Mechanic Arts, Ames.
KANSAS.—H. J. C. Umberger, Kansas State College of Agriculture and Applied Science, Manhattan.
KENTUCKY.—T. P. Cooper, College of Agriculture, University of Kentucky, Lexington.
LOUISIANA.—J. W. Bateman, Louisiana State University and Agricultural and Mechanical College, University Station, Baton Rouge.
MAINE.—A. L. Deering, College of Agriculture, University of Maine, Orono.
MARYLAND.—T. B. Symons, University of Maryland, College Park.
MASSACHUSETTS.—W. A. Munson, Massachusetts Agricultural College, Amherst.
MICHIGAN.—R. J. Baldwin, Michigan State College, East Lansing.
MINNESOTA.—F. W. Peck, Department of Agriculture of the University of Minnesota, University Farm, St. Paul.
MISSISSIPPI.—L. A. Olson, Mississippi State College, State College.
MISSOURI.—R. R. Thomasson, acting director, College of Agriculture, University of Missouri, Columbia.
MONTANA.—J. C. Taylor, Montana State College of Agriculture and Mechanic Arts, Bozeman.
NEBRASKA.—W. H. Brokaw, College of Agriculture, University of Nebraska, Lincoln.
NEVADA.—C. W. Creel, College of Agriculture, University of Nevada, Reno.
NEW HAMPSHIRE.—J. C. Kendall, University of New Hampshire, Durham.
NEW JERSEY.—H. J. Baker, College of Agriculture and Mechanic Arts of Rutgers University (State University of New Jersey), New Brunswick.
NEW MEXICO.—W. L. Elser, New Mexico College of Agriculture and Mechanic Arts, State College.
NEW YORK.—C. E. Ladd, New York State College of Agriculture, Ithaca.
NORTH CAROLINA.—I. O. Schaub, State College Station, Raleigh.
NORTH DAKOTA.—C. F. Monroe, North Dakota Agricultural College, State College Station, Fargo.
OHIO.—H. C. Ramsower, College of Agriculture, Ohio State University, Columbus.
OKLAHOMA.—D. P. Trent, Oklahoma Agricultural and Mechanical College, Stillwater.
OREGON.—P. V. Maris, Oregon Agricultural College, Corvallis.
PENNSYLVANIA.—M. S. McDowell, Pennsylvania State College, State College.
RHODE ISLAND.—George E. Adams, Rhode Island State College, Kingston.
SOUTH CAROLINA.—W. W. Long, Clemson Agricultural College of South Carolina, Clemson College.
SOUTH DAKOTA.—Dean C. Larsen, South Dakota State College of Agriculture and Mechanic Arts, Brookings.
TENNESSEE.—C. A. Keffer, College of Agriculture, University of Tennessee, Knoxville.
TEXAS.—O. B. Martin, Agricultural and Mechanical College of Texas, College Station.
UTAH.—William Peterson, Agricultural College of Utah, Logan.
VERMONT.—J. E. Carrigan, acting director, University of Vermont and State Agricultural College, Burlington.
VIRGINIA.—J. R. Hutcheson, Virginia Polytechnic Institute, Blacksburg.
WASHINGTON.—F. E. Balmer, director, State College of Washington, Pullman.
WEST VIRGINIA.—N. T. Frame, College of Agriculture, West Virginia University, Morgantown.
WISCONSIN.—C. L. Christensen, director, K. L. Hatch, associate director, College of Agriculture, University of Wisconsin, Madison.
WYOMING.—A. E. Bowman, College of Agriculture, University of Wyoming, Laramie.

---

[1] Revised to Apr. 15, 1932.

234533

REPORT OF EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS IN THE UNITED STATES, 1931[1]

Prepared by the Extension Service
C. W. WARBURTON, Director
C. B. SMITH, Assistant Director

This report supersedes the annual reports entitled "Report of the Director of the Extension Service" last issued for the fiscal year 1930, and "Cooperative Extension Work" last issued for the calendar year 1929.

CONTENTS

	Page
Introduction	1
Drought emergency met	2
Production adjustment sought	3
Funds administered	4
Personnel	4
Economics extension expansion	4
Agricultural improvement programs	4
4-H club development	5
Land utilization	5
Teaching methods improved	6
Extension Service Review	6
Talking-picture production	7
Cooperative extension work	7
Personnel	7
Special developments	9
County agricultural agent work	12
Cooperative extension work—Continued	
Home demonstration work	22
Boys' and girls' 4-H club work	37
Extension work with negroes	43
Farmers' institutes	53
Specialists' activities	55
Extension in agricultural economics	70
Extension studies and teaching	74
Information and visual instruction	77
Exhibits	80
Cooperation with fairs	82
Preparation of exhibit	83
Funds and personnel	84
Motion pictures	85
Appendix	87

INTRODUCTION

During 1930 an emergency existed in practically all agricultural regions of the United States. In meeting this emergency, the extension forces of the State agricultural colleges and the department played no uncertain part. Over large areas the situation was so urgent that it was necessary for extension workers to lay aside temporarily much of their regular programs and devote the major part of their time to initiating and directing measures designed to help farmers relieve the distressing conditions.

Already made difficult by world-wide economic depression, unfavorable markets, and the existence of surplus stocks of some of the

[1] Funds for extension work are appropriated for fiscal years ending on June 30, whereas extension agents prepare their reports for calendar years. For this reason statements of funds expended are given for the fiscal year ended June 30, 1930, and results of work done for the calendar year ended Nov. 30, 1930.

NOTE.—Extension work in agriculture and home economics, authorized by the Smith-Lever Act of May 8, 1914, is carried on cooperatively by the U. S. Department of Agriculture and the State agricultural colleges. This report was written and printed in accordance with a provision of the act of Congress of Mar. 4, 1915, entitled "An act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1916." (38 Stat. L., p. 1110.)

98635—32——1

major farm commodities, particularly wheat and cotton, the situation of the farmers was further complicated by the most severe drought recorded by the Weather Bureau. The drought caused its greatest damage in a region extending roughly from the Atlantic coast of Maryland and Virginia westward to Oklahoma and Texas. Severe drought damage also occurred in several Northwestern States. Production of most farm crops was greatly reduced in these regions. Instead of being followed by the increased values usually resulting from crop shortages, the reduced farm production was accompanied toward the end of the season by a drop in farm commodity prices to the lowest point in 15 years. The decline in prices affected farmers in practically all sections of the country. This unusual combination of adverse conditions caused much economic loss and suffering to thousands of farm families.

DROUGHT EMERGENCY MET

Not only was the farm income considerably curtailed during the year by drought conditions and low prices, but the reduced production made it impossible in drought-affected areas to store a sufficient amount of food for home consumption. The important problem therefore was to provide farming people with an adequate food supply for the winter. Low cash and food resources on the farms seriously hindered the efforts of extension agents to advise farm families about cheap, wholesome foods which would maintain health and particularly would prevent such diseases as pellagra, caused by inadequate diet. Nevertheless these efforts were made, and the cooperation of food manufacturers and dealers in insuring availability of needed foods at the lowest possible cost, was obtained.

Farm men and women were urged to plant fall gardens of rapidly maturing vegetables, to can all available food products, and to preserve eggs for winter use. Demonstrations in canning poultry and beef showed farm people how to provide a supply of meat for the winter. It was pointed out that slaughtering farm animals and canning the meat relieved farmers from the necessity of purchasing feed for the animals or selling them at the prevailing low prices. In an effort to relieve the impending shortage of clothing during the winter home demonstration agents and local leaders taught farm women how to renovate and remodel their garments. Extension agents also cooperated closely with representatives of the Red Cross by indicating the farm families who were particularly destitute and in need of urgent help in procuring food and clothing.

Farmers were advised on emergency rations for their livestock; were shown how to cull their herds and flocks; and were urged to plant forage crops for fall and spring pasture. Extension workers assisted in locating needed supplies of feed and forage and worked out plans for bringing in feedstuffs at the lowest possible cost. The railroads granted reduction in freight rates on hay, feed, and water shipped into the drought areas and on livestock shipped out from August 14 to November 30. County agricultural agents aided farmers to obtain the reduced rates. They approved applications for lower rates on approximately 60,000 carloads of hay, feed, and livestock at an estimated saving to the farmers of several million dollars.

A comparatively small balance remained from an appropriation made by Congress in March, 1930, for loans to farmers for the purchase of seed and fertilizer. This balance was immediately made available to finance the sowing of fall-pasture crops in Alabama, Missouri, Oklahoma, and Virginia. Restrictions in the act did not permit the money to be lent to farmers in other States. A joint resolution of Congress approved on December 20, 1930, provided $45,000,000 for loans to farmers in the drought, storm, or hail-striken regions for buying seed, fertilizer, feed, and fuel and oil for tractors. These funds brought definite financial aid to farmers in the drought region who needed assistance in producing crops during the 1931 season. Extension agents informed farmers where to apply for the loans and how to comply with the necessary requirements for obtaining them.

PRODUCTION ADJUSTMENT SOUGHT

Extension agents throughout the country were active in advising farmers about the Federal Farm Board program for establishing national commodity cooperative-marketing agencies through which local, State, and regional cooperatives might function more effectively. Although the formation of cooperative-marketing associations is a part of the long-time program to help farmers put their operations on a more profitable basis, work of this nature was of considerable help during the emergency.

Industrial depression, causing a declining demand for cotton and wheat, accompanied by an expanding production of these money crops, was responsible for the accumulation of large surplus stocks. The result was that the cotton and wheat States were faced with the necessity of selling their cash crops in many cases at prices below the cost of producing them. The efforts of the Farm Board to relieve the situation by adjusting the production of these commodities to more nearly meet the potential requirements of consumers were vigrously supported by extension agents. Information about market conditions, probable future demand, and other economic facts was supplied to farmers, who were thus enabled to plan their farm operations with a more intelligent understanding of domestic and world economic conditions. Methods of lowering production costs, of improving the quality of crops grown, and of handling and grading crops were emphasized.

Farmers in the wheat area were encouraged not to depend on wheat as a major source of income on farms where soil and topography did not permit low costs of production; to grow a sufficient acreage to permit economical use of modern machinery, power, and the farm labor supply; to conserve rainfall by terracing; to adopt a program of soil improvement embracing crop rotation, use of legumes, and raising of livestock; and to add supplementary farm enterprises, such as beef cattle, dairy cattle, or poultry production where they are profitable in connection with wheat farming. In the Southern States, extension workers made a thorough study to determine on what phases to concentrate during the emergency. Most Southern States decided to emphasize adoption of the system of balanced agriculture known in the South as the safe-farming pro-

gram. In urging this program, extension workers encouraged farmers to plant enough food and feed crops to supply their own needs before undertaking to plant cotton. They also advised the farmers to plant cotton only on land that had produced an average of more than one-third of a bale per acre during the last five years.

FUNDS ADMINISTERED

Federal appropriations amounting to $6,192,936 were allotted to the 48 States and the Territories of Hawaii and Alaska for extension work under the terms of the Smith-Lever appropriation acts, and $1,480,000 was allotted under the terms of the Capper-Ketcham Act. Congress made a special appropriation of $1,000,000 for allotment to the States primarily for extension work in economics and marketing. The direct Federal appropriation for extension work was $1,755,000, of which $1,550,000 was for farmers' cooperative demonstration work and motion pictures, $15,000 for general administrative expenses, $120,000 for exhibits, and $70,000 for farm forestry extension. The States, counties, and other agencies contributed $15,876,250 for cooperative extension work. The total of all these items available for cooperative extension work with the State agricultural colleges and for motion pictures and exhibits was $26,304,186.

PERSONNEL

The field force engaged in extension work in agriculture and home economics on June 30, 1931, consisted of 6,179 persons. The personnel of the department Extension Service in Washington consisted of 192 persons, of whom 7 were employed in the office of the director, 136 in the office of cooperative extension work, 26 in the office of exhibits, and 23 in the office of motion pictures. In addition, 10 subject-matter extension specialists were employed by other bureaus of the department in cooperation with the Extension Service.

ECONOMICS EXTENSION EXPANSION

The realization by the Extension Service that the problems faced by agriculture at present are largely economic led to a material expansion in economics extension personnel. During the year the States added 84 specialists to their forces, making a total of 204 full and part-time workers in this field. To meet the greatly enlarged demands from the field, the personnel in the department was increased and the economics extension work in marketing, farm management, outlook, and other lines was coordinated by establishing, in cooperation with the Bureau of Agricultural Economics, an economics extension unit in the office of cooperative extension work.

AGRICULTURAL IMPROVEMENT PROGRAMS

During the year county extension agents and specialists made material progress in developing programs for agricultural improvement. This type of program was variously called adjustment programs, long-time programs, economic programs, or farm-and-home programs. Local leaders, extension agents, and specialists in many

States came together, studied the farm situation, and agreed upon desirable adjustments in enterprises, farm organizations, and farm management that the farmers should make over a period of years in order to increase their incomes. The extension program for the current year was then developed on the basis of the adjustments agreed on. The adjustment program was based on searching study of local situations and needs as well as on general farm-management and market data. The information on local practices, trends, and needs was gathered in the following fields: Local farm business organization and farm-management systems which show the larger income returns; labor efficiency and price and cost data which affect enterprise and farm profits; economic factors which are affecting or may affect farm enterprises and organization, such as market situations and trends, transportation, influence of competing areas, and changes and trends in demand and production; and practices which are the most efficient and economical in carrying out proposed adjustments.

The adjustment program, whatever its type may be, is one of the great advances in extension work. It causes local needs and situations to be really studied by the people and the extension agents. Better incomes and standards of life and not merely the adoption of certain skills and improved production practices are its objectives. Under such a program specialists coordinate their efforts in solving the larger problems instead of offering projects in competition with one another. It allows the county agent to concentrate on the big problems which affect country life and does not diffuse his energy over a great miscellany of projects, demonstrations, and activities. Under it the people join in attacking a common problem instead of thinking of individual service. This plan has done much to systematize and spread the extension work in the counties and to improve the efficiency of extension workers.

4-H CLUB DEVELOPMENT

The 4-H club work continued its consistent growth during 1930, the enrollment for the year being 822,714 boys and girls as compared with that of 756,096 in 1929. Much credit for the results accomplished by 4-H club members in 1930 must be given to the 85,000 local club leaders who enlisted in the movement. (Fig. 1.) Beneficial effects of the Capper-Ketcham appropriation to increase the part-time personnel who give time to 4-H club work were evident both in the increased enrollment and in the increased percentage of club members completing the full requirements of their work. This increase was 9.23 per cent greater in 1930 than in 1929.

LAND UTILIZATION

Problems of land utilization are becoming important in many States and are leading to a closer coordination between forestry extension work and efforts for improved agricultural production along other lines. A definite policy in the use of marginal and submarginal lands is in formation. Unquestionably there will be marked developments in this field in the near future.

TEACHING METHODS IMPROVED

Extension teaching methods took more definite form during the year. County extension agents and specialists made more effort to obtain local data as a basis on which instruction might be made more definite and practical. There was also a distinct advance in the utilization of various information mediums, such as circular letters, news stories, printed bulletins and leaflets, and film strips. State extension specialists and county extension agents used localized film strips much more extensively than in previous years.

FIGURE 1.—A 4-H club boy in his garden

EXTENSION SERVICE REVIEW

During 1930 the Extension Service began the publication of a printed house organ entitled " Extension Service Review " for extension workers in agriculture and home economics. This publication brings to the attention of all extension workers the results obtained in various phases of extension activity and the teaching methods employed. Space is provided in it for discussion of various problems and policies affecting the progress of extension work. Through this publication extension agents are advised of the service available from the department, the Federal Farm Board, and other governmental agencies. Establishment of this publication is regarded as a distinct forward step in the effort of the Extension Service to keep its field force advised of the many developments in extension teaching and of trends in agriculture and home making that affect the character of extension activities.

TALKING-PICTURE PRODUCTION

After a lengthy study of the motion-picture situation and consideration of the factors in production of talking pictures, the Extension Service installed equipment for talking-picture production in its motion-picture studio. Three talking pictures had been produced by the end of the fiscal year.

COOPERATIVE EXTENSION WORK

PERSONNEL

There were 6,161 persons employed June 30, 1931, on the field staff of the Extension Service in the 48 States and the Territories of Hawaii, Alaska, and Porto Rico, an increase of 219 during the year. Of this number 4,444 were located in the counties. This group included 2,382 white county agricultural agents, 234 assistant county agricultural agents, 167 negro county agents, 1,241 white county home demonstration agents, 10 urban home demonstration agents, 36 assistant home demonstration agents, 123 negro home demonstration agents, 218 county boys' and girls' club agents, and 33 assistant county boys' and girls' club agents. There were 1,222 subject-matter specialists, usually with headquarters at the State agricultural colleges and 495 supervisors and administrative officers.

The new workers added during the year included 28 white county agricultural agents and 8 assistants, 79 white county home demonstration agents, 2 county boys' and girls' club agents and 2 assistants, 7 administrative and supervisory workers, and 122 subject-matter specialists. The number of negro county agents was reduced by 8, urban home demonstration agents by 2, assistant home demonstration agents by 15, and negro home demonstration agents by 4.

During the year the economics extension workers, employed in cooperation with the Bureau of Agricultural Economics, were grouped in a single unit, with H. M. Dixon as chairman. Through the cooperation of the New York State College of Agriculture of Cornell University, C. E. Ladd and M. C. Bond rendered helpful service in the organization of economics extension work in the States. Similar service was given by C. R. Arnold through the cooperation of the College of Agriculture of the Ohio State University. D. W. Watkins, who had served as assistant director of extension work in South Carolina for the last 12 years, was appointed extension economist on March 23, 1931.

In cooperation with the Bureau of Agricultural Economics and the agricultural colleges of Idaho, Montana, and Washington, H. E. Drobish was employed September 15, 1930, to conduct economics extension work on potatoes in the Pacific Northwest. This work is similar to that which has been carried on during the last two years in the early-potato producing areas of the Southeast.

Economics extension work in tobacco growing was carried on during the year in Virginia, North Carolina, South Carolina, and Georgia in cooperation with the agricultural colleges of those States and the Bureau of Agricultural Economics. R. M. Cooper was ap-

pointed November 1, 1930, to lead this work. It was discontinued June 30, 1931, however, because of the inability of several of the colleges to continue financial cooperation.

In cooperation with the Bureau of Animal Industry, E. M. Nighbert was employed November 5, 1930, to carry on extension work in animal parasite control.

Three extension specialists in economic entomology, F. D. Butcher, M. P. Jones, and P. D. Sanders, were appointed during the year in cooperation with the Bureau of Entomology.

In cooperation with the Division of Agricultural Engineering of the Bureau of Public Roads, S. P. Lyle was employed October 1, 1930, to conduct extension work in agricultural engineering.

Dairy extension work suffered a severe loss in the death on May 18, 1931, of J. H. McClain, extension dairyman for the Southern States.

Cooperative extension work in the Territory of Alaska was begun in cooperation with the Alaska Agricultural College and School of Mines July 1, 1930, when the first Federal appropriation of $10,000 became available. The president of the college, Charles E. Bunnell, was appointed director of extension work in Alaska, and an assistant director for agriculture, G. W. Gasser, and an assistant director for home economics, Mrs. Lydia Fohn-Hansen, were employed July 1, 1930.

Leon S. Merrill, who had served as director of the extension service in Maine since 1914, relinquished that position December 31, 1930, to devote his entire time to his work as dean of the college of agriculture. He was succeeded as director of extension by Arthur L. Deering, who had been his assistant for a number of years.

R. S. Wilson, who had devoted more than 23 years to demonstration and extension work in Mississippi, resigned as director of extension work in that State August 31, 1930, and was succeeded by L. A. Olson, who had served as county agent and district agent for a number of years.

A. J. Meyer, director of extension work in Missouri since 1914, who had a large part in the development of the work in that State, died September 10, 1930. R. R. Thomasson was made acting assistant director in charge, October 21, 1930.

C. E. Ladd, director of extension work in New York, was on leave during the greater part of the year, and R. H. Wheeler served as acting director.

Thomas Bradlee, who had served as director of extension work in Vermont since 1914, when the work was started in cooperation with the College of Agriculture of the University of Vermont, died February 21, 1931. Joseph E. Carrigan, who had been assistant county agent leader for a number of years, was made acting director July 1, 1931.

Frank E. Balmer, who had been employed as county-agent leader in Minnesota for the last 17 years, was appointed director of extension work in the State of Washington November 1, 1930.

H. L. Russell, director of extension work in Wisconsin, resigned in April, 1931, and was succeeded by C. L. Christensen, who had served as secretary of the Federal Farm Board from the time it was organized. K. L. Hatch, assistant director in Wisconsin, was made associate director February 1, 1931.

SPECIAL DEVELOPMENTS

Through the increasing use of tractors and the larger farm machinery that goes with them, the use of more fertilizers and the planting of better seed, the larger use of legumes, and better organization of farms, farmers now are easily producing more food and fiber crops than the Nation will consume at a fair price to the farmer. Markets for American produce abroad are depressed. The problem before the farmer, therefore, is not so much one of production as of preventing overproduction, which always reacts unfavorably to him. These are some of the factors stimulating the great interest of farmers and extension forces in economics extension work.

The difficulties that farmers have experienced have brought forcefully to them the fact that they need more information concerning their activities, particularly on the business side and on general marketing principles and practices. Good farming to-day requires more attention than formerly to the problems of competition, to supply and demand, to credit and its costs, to margins and costs of distribution, and to many other problems of similar nature. There is also a growing appreciation of the fact that the present agricultural situation represents many problems and must be attacked from many angles.

In short, the field of economics extension is definitely broadening, and in 1930 much progress was made toward meeting, in broader fields and in a larger way, the increased demand for aid. The aim in this work is to develop and project a carefully planned program in which cooperating agencies and individuals have their selected parts and which, as it develops, unfolds into a piece of valuable educational extension work. The enlarged service in this field in 1930 was brought about through better organization, additions to personnel, greater emphasis on county extension programs, and increased volume of subject matter.

An increased Federal appropriation of $1,000,000 for extension work and the demand for more extension work in farm management, marketing, and the use of agricultural outlook, caused the Extension Service to increase from 120 to 204 the specialists in economic fields. The total amount of time given by all extension workers to economics extension work increased about 50 per cent.

Reports indicate that never before has there been such a demand from farmers for assistance and counsel on their marketing problems. Improvements and shifts in production methods, highway developments, changes in marketing practices and in size and character of competing agencies, and changed attitude of farmers toward existing systems of marketing are responsible for many of the demands for facts and counsel on future plans and procedure.

The extension economics specialists gave efficient aid to the Federal Farm Board in developing regional plans for marketing staple farm products. Not only did extension economists and county agents assist the Federal Farm Board members in various parts of the country in holding meetings and conferences and in making other contacts, but they carried through the year aggressive educational programs dealing with marketing principles, policies, and practices.

In general, the activities were designed to promote understanding of marketing methods, solve mechanical problems, develop cooperative effort, strengthen cooperative associations, reduce marketing costs, improve packing, quality, and distribution, and encourage better business practices.

FEED GROWING STIMULATED

Both dairy and general farm livestock suffered severely in the drought early in 1930, and extension workers made a vigorous effort to encourage the growing of home-grown feeds. The entire live-at-home program which has been conducted in a number of States for several years, was given a greater impetus, and it is believed that many practices adopted under emergency conditions in 1930 will be retained as regular farm practices.

HOME GARDENS AND SURROUNDINGS

The need for adequately meeting the food requirements of the farm family and the intensive work carried on by food and nutrition specialists in many States, no doubt, materially encouraged the growing of more home gardens. The efforts made over many years by extension agents, toward making the home the center of farm life has led without question to increased interest in the landscaping and beautification of home grounds.

RECREATION DEVELOPED

Recreational activities are a developing phase of extension that received increased attention during the year. The National Recreation Association is now furnishing three men who, in cooperation with the State agricultural extension forces, give practically their whole time to training leaders in promoting recreation among rural people, both adults and juniors. This activity seems to be meeting a real need and is increasingly popular. During the year, over 5,000 leaders were trained in this work, which is designed to be not only recreational but health giving and socializing.

PROFESSIONAL IMPROVEMENT

Interest of extension workers in improving their professional ability was evident in the greater number of courses given by universities and colleges for extension workers desiring to follow advanced study in economics and other fields. Such courses were given at Cornell University, the Ohio State University, the University of Wisconsin, and the State Agricultural College of Colorado. Sabbatical leave for such study was given to agents in some States.

DISTRIBUTION OF ACTIVITY

The relative amount of time that county extension agents and specialists devote to the various subject-matter lines of work gives a fairly good picture of the national extension program. The distribution of time remains quite constant. (Table 1.) In the county agent reports for 1930 soils work has been distributed among the various crops. Time spent on organizing the people of the counties for extension work and in building the extension programs has been separated from miscellaneous activities for the first time.

TABLE 1.—*Percentages of agents' and specialists'* [1] *time devoted to different projects,* [2] *1925–1930*

Project	1925	1926	1927	1928	1929	1930 [2]
Soils	5.2	5.3	4.8	5.1	5.1	--------
Farm crops	13.1	13.1	12.4	11.5	11.6	15.2
Horticulture	6.9	7.3	7.1	7.3	7.0	8.7
Forestry	.5	.7	.9	1.0	1.0	.9
Animal husbandry	7.1	7.5	8.2	7.8	7.6	6.5
Dairy husbandry	7.0	7.1	7.9	8.7	8.6	7.7
Poultry husbandry	8.7	9.0	8.8	8.1	7.9	7.6
Rural engineering	3.7	3.6	3.4	3.3	3.2	3.3
Rodents and insects	2.0	1.7	1.5	1.3	1.1	1.3
Agricultural economics	3.9	4.0	4.1	4.0	4.3	6.2
Foods	4.8	4.6	4.6	4.4	5.2	7.0
Child care and training	--------	--------	--------	--------	--------	.6
Nutrition	2.3	2.6	2.5	2.6	2.3	--------
Clothing	7.9	7.1	6.8	6.8	6.9	6.7
Home management	1.7	1.5	1.5	1.7	2.2	2.1
House furnishing	1.2	1.8	2.0	2.4	2.6	2.6
Home health and sanitation	1.2	1.2	1.2	1.2	1.2	1.3
Community activities	6.2	5.9	6.0	5.8	5.9	4.0
Miscellaneous	16.6	16.0	16.3	17.0	16.3	7.5
Building extension program	--------	--------	--------	--------	--------	3.7
Organization	--------	--------	--------	--------	--------	7.1

[1] Only field work of specialists as reported by county extension agents is included.
[2] In 1930 time spent on soils has been distributed among the various crops, nutrition has been combined with foods, child care and training has been added as a new project, and time spent on maintaining the county extension association and in building extension programs has been separated from miscellaneous.

The annual report form used in 1930 also furnished for the first time some information on the ages of club members and the number of years they have been in club work. According to Table 2, 74.1 per cent of the boys and girls had been enrolled in club work for 1 or 2 years, 13.5 per cent had been enrolled 3 years, and the other 12.4 per cent had been in club work for 4 years or more. From Table 3 it will be noted that 40.8 per cent of the boys and girls in club work were 12 years old and under, 40.7 per cent were aged 13 to 15 years inclusive, and the remainder, or 18.5 per cent, were from 16 to 20 years of age.

TABLE 2.—*Membership in 4–H clubs according to length of time in club work*

Members	Percentage of club members enrolled for—					
	One year	Two years	Three years	Four years	Five years	Six years and over
Boys	47	25.9	14.2	7.5	3.3	2.1
Girls	49.8	25	13.1	7.2	3.1	1.8
Total membership	48.7	25.4	13.5	7.3	3.2	1.9

TABLE 3.—*Membership in 4–H clubs distributed according to age*

Members	Percentage of club members enrolled who were aged—										
	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years
Boys	11.3	12	14.8	14.8	14.6	11.7	9	5.8	3.4	1.7	0.9
Girls	12.9	13.1	16.6	15.4	14.1	10.8	7.9	4.8	2.6	1.2	.6
Total membership	12.3	12.6	15.9	15.2	14.3	11.2	8.3	5.2	2.9	1.4	.7

COUNTY AGRICULTURAL AGENT WORK

LEADING ACTIVITIES

ECONOMICS

The year 1930 was one of extraordinary activity in the field of applied economics. This was true because of the general depression, falling prices, the great drought, the effort of the Federal Farm Board to reduce the production of certain commodities and to develop cooperative marketing on a nation-wide scale, and the growing recognition by extension agents and farm leaders of the need for studying and relieving the economic problems which beset the farmer. (Fig. 2.)

In many States the county extension program in agriculture expressed a serious effort to improve the agricultural situation by one or more of the following activities: (1) Determining production costs, (2) determining and teaching profitable farm business organization and management, (3) adjusting production to demand, (4) selecting enterprises and determining volume in line with outlook information, (5) reducing the costs of distribution, and (6) studying the need for and promoting education in successful cooperative marketing.

In Colorado, upon the suggestion of the Federal Farm Board that the burdensome surplus of wheat be reduced, a campaign to that end was conducted in the 14 counties that produce 85 per cent of the State's wheat crop. The international, national, and local wheat situations were explained to farmers by means of charts and graphs setting forth production trends, carry-overs, price trends, and tariff and freight barriers, and substitute crops were suggested. The net result of this campaign was that Colorado farmers reduced their wheat plantings 12 per cent as compared with 1929.

In Louisiana the agents used outlook information on cotton to help farmers adjust their plantings to meet the probable unfavorable situation. Farmers in nearly every community were given the outlook information and warned that the situation forbade expansion or demanded actual curtailment of cotton plantings.

The agents in Missouri were successful in bringing about a much stronger cooperative system in marketing a $3,000,000 berry crop. A fruit producers' exchange was formed from 12 leading small organizations, and half the berry crop of the State was marketed through this agency.

The county agent of Weld County, Colo., reported that in cooperation with the State bureau of markets, a campaign lasting from December to May was used to organize a cooperative wheat pool. In all, 43 meetings were held, and 490 members enrolled. These members controlled 101,978 acres, representing 76 per cent of the last five years' average acreage. Weld County has about 10 per cent of the State's wheat acreage and 30 per cent of the acreage assigned to the pool. The same agent assisted in another marketing project—the exchange of seed potatoes between dry-land and irrigated districts. He reported:

> This project got a splendid start with around 15 cars of seed being brought to the irrigated district. If most of the seed that is brought in from the outside and used in the irrigated section were brought from our own dry-land area, it would mean that about 75 cars would be used, which is about the present production of the dry-land area.

The types of economic enterprise work carried on by California county agents are shown in the report of the agent of Stanislaus County:

FIGURE 2.—Distribution of county agricultural agents

A series of 17 demonstration meetings on deciduous long pruning was held in 1930, with an attendance of 610 growers. The increased interest was due to the high price of peaches and apricots during the 1929 season. Economic data derived from previous studies on almonds, apricots, and peaches were presented in the form of charts at the field meetings. A comparison was

made between a cheap pruning job and one that was properly done. In 1929, when peaches were high, it was found that those growers who spent $4 more for pruning had a return of $250 per acre more than those who used the more drastic method of cutting back the trees and thereby reducing the crop.

Pruning costs average close to $20 per acre for peaches, with an additional charge of $2.50 to $3.50 for brush disposal; for pruning apricots the cost is approximately $16.50 per acre, and $2.50 additional for brush disposal; almond pruning costs were about $5.50 per acre, which included brush disposal.

The agricultural extension service spent considerable time during the early summer in assisting the Federal Farm Board with its plan of disposing of the 1930 grape crop in Stanislaus County. The extension service aided in the organization, suggesting leaders and men to help in the sign-up campaign. Twenty-four committee meetings with an attendance of 244 were held in connection with the grape-control plan. The greater part of six weeks was spent by the farm adviser in assisting in the grape campaign in this county. The final result was about an 88 per cent sign-up for the Federal plan in Stanislaus County.

Use of the agricultural outlook has become the leading farm-management project, and in many States the county agricultural agents hold outlook meetings throughout the year. In Minnesota these meetings, particularly in the fall, are concerned with the service outlook and with feeding operations with cattle and sheep; in the spring they concentrate on crops, dairying, and poultry. The general tendency in many States is to consider outlook facts in planning any important project. Adjustments to economic situations and trends, price changes, time of marketing, and costs of production as well as productive factors, all are used as a basis for outlining the practices a farmer should follow in bettering an enterprise.

DAIRY HUSBANDRY

Extension work in dairying is marked nationally by the following standard kinds of projected activity: Promotion and management of herd-improvement associations and bull associations; improved-sire campaigns and other breeding work; feeding schools; disease control; and in general, activity intended to improve the production of cows by better management, feeding, and breeding practices. During 1930 the county extension agents emphasized three comparatively new types of work: Adjustment of production to demand; production of high-quality milk; and organization of groups for a simpler and more economical method of recording and listing the production of cows.

Adjusting production to demand requires close contact with market situations and outlooks, and involves the task of teaching dairymen to manage their production so as to take advantage of the better prices paid in certain months. Dairy farmers long have needed a simple and inexpensive system of checking the production of their cows and the cost of production. The so-called mail-order testing system used by the county agents in Wisconsin has proved its worth. In Wisconsin there are now 13 associations organized to use this system. Members of these associations own 2,567 herds totaling 38,185 cows. The county agent for Marathon County reports that the mail-order testing association in that county has enrolled owners of more than 400 herds. After three years of its work, farmers who have been members of both the standard herd-improvement associations and associations of the newer type, report that the new or-

ganizations give satisfaction, and give it at less cost than did the standard herd-improvement associations.

Regional laboratories for this system of testing and record work are set up in four counties in New York. The dairy-farmer member of the so-called dairy-record class weighs the milk of his cows, takes night and morning samples of each cow's milk, and sends these samples in especially designed containers to the laboratory, with his record of the weights of milk obtained and the weight of grain and forage fed to each cow. The milk is tested, the computations and records are made in the central laboratory, and the records, summaries, and instructions for each cow and for the herd are sent back to the farmer. In 1930, 354 herds and 4,919 cows were included in the work, at a cost of 12 cents per cow per month.

The short-cut or mail-order system of testing supplements rather than supplants the work of the regular herd-improvement association. Enrollment of cooperators who are not reached by the regular type of association results in a larger number of men systematically observing the feeding and production of their cows and then taking definite steps to improve their breeding and feeding. Encouragement is also given to organizing herd-improvement associations of the regular type. Fifteen new associations of this type were organized in New York.

Michigan county agents, with the aid of dairy specialists, are carrying out a highly developed dairy-extension program. Michigan now has 88 dairy-herd improvement associations embracing 1,721 herds and 2,286 cows. Dairy farmers in that State built 1,000 safety breeding pens last year. County agents and dairy leaders now are preparing to attack the problems of removing the 20,000 scrub and grade dairy bulls in Michigan and of testing more cows for production; only 5 per cent of all cows are now being so tested.

The county agents in the Southern States are working under unfavorable conditions to improve dairying and to put the industry on a firmer basis. The lack of home-grown feeds, particularly forages, and of productive animals, and the need for more satisfactory markets are real drawbacks. Yet the agents report most encouraging progress. In Clarke County, Ga., there is a purebred bull of known breeding in every community; 85 per cent of the cows are being bred to these bulls, and 70 per cent of the feed is grown at home. In Richmond County, Ga., 500 cows have been sold to farmers on an installment plan sponsored by two local banks. In northeastern Georgia, 216 result demonstrations in dairying were completed by 20 agents, and 149 registered dairy bulls were placed by 19 agents.

LEGUMES

County agricultural agents are making a nation-wide effort to persuade farmers to plant more legume hay and pasture crops. To several thousand county agents and the leaders working closely with them, alfalfa, clover, sweetclover, soybeans, hairy vetch, Austrian peas, and Lespedeza are symbols of a new wealth and a new order in farming. Illinois seeded 750,000 acres of sweetclover last year, despite the fact that only a few years ago sweetclover was still considered a weed. The whole State of New York has been drawn into

active cooperation in a clover and alfalfa campaign which was begun in a few counties in 1925. The cumulative effect of this long-time campaign is that many thousand acres of alfalfa or clover are newly planted in the State each year. Missouri reported an increase from 10,000 acres of soybeans in 1920 to 448,000 acres in 1930. The quantity of limestone used in Missouri grew from 9,020 tons in 1919 to 223,400 tons in 1930, an increase of about 2,370 per cent. The railroads cooperated in hauling 17 special trains of lime directly to fields on the right of way between stations. Two hundred and twenty-one lime pulverizers crushed native stone for local use in districts removed from railways.

County agents in Alabama reported that as a result of a state-wide campaign for winter legumes, 1,256,289 pounds of Austrian peas and hairy vetch seed was purchased cooperatively in 1930. This is a slight increase over the quantity purchased in 1929, but the total is remarkable when the drought and depressed financial situation are considered. The use of summer legumes kept pace with the advance in winter legume use; 20 carloads of soybean seed were brought into the State in addition to the quantities sold by local seedsmen and merchants. Wisconsin county agent reports show an increase in 10 years from 257,000 acres of clover and alfalfa to 1,308,000 acres, or 408 per cent.

County agents in the Corn Belt States have long emphasized the improvement of the corn crop. During the last five years particular emphasis has been placed on testing seed corn for diseases and for germination. In Whitley County, Ind., in 1930, 53,000 ears of seed corn were tested at the central station alone, and 17,000 ears were discarded as unfit for seed. Project leaders reported that 66,500 ears were tested at home by farmers.

Improvement of cotton is a major extension enterprise for all agents in the Cotton Belt. (Fig. 3.) The many demonstrations conducted by farmers under the direction of the agents have emphasized the production of cotton of higher quality at lowered costs. These demonstrations usually show a yield double that of the State average.

POTATOES

Extension work in improving potato production is an important activity in many Northern States. The effort to obtain high yields through the use of certified seed, the use of certain strains of seed, the use of rotation crops, seed-bed preparation, fertilizers, and disease and insect control still engage the attention of county agents. In the Eastern States 300 or 400 bushel potato clubs are organized to stimulate the farmers' interest in adopting the practices demonstrated. During this year, greater attention than before was given to producing high-quality potatoes. Use of padded diggers, better handling practices, disuse of lands infested with wireworms or lands too heavy and soggy to produce high-quality potatoes, are practices which have followed the teaching efforts of county agents in potato-growing counties. Wherever market conditions are favorable, planting larger units has been encouraged, in order to cut the cost of production by more economical use of labor and machinery.

HORTICULTURE

Clubs or contests were conducted by extension agents to stimulate interest in higher yields and economical production. For instance, 90 per cent apple clubs are intended to influence the fruit grower to apply the recommended sprays more carefully, in order to obtain fruit 90 per cent free of insect or disease injuries. The spray-information service extended through the county agents has resulted in the production of more marketable, higher-quality apples in the East. The spray service is highly organized in some States. During the fruit-development season New York counties cooperate in

FIGURE 3.—County agent making adjustments on a riding cultivator to obtain greater efficiency of operation

the employment of special assistant county agents who have charge of the spray-improvement programs. The men in charge of the spray services maintain close touch with local and district weather-forecasting offices, and in most counties a telephone relay system is set up to give information to the growers at the most crucial times.

An example of the aid to growers which has been developed by the extension service, is cited from Plymouth County, Mass., where the annual cranberry crop is worth $3,500,000. Diseases and insects were seriously affecting the cranberries. Plymouth County and Barnstable County, adjoining, cooperated in engaging a special assistant county agent who works with cranberry growers three months a year. He cooperates with the director of the cranberry research station at Wareham, and gives the growers personal service on problems of management, and disease and insect control. Special

disease, insect, and frost warnings are relayed from the research station to the operators of the cranberry bogs.

County agents are alert to help farmers meet every new need. The agent in Chelan County, Wash., has been urging orchardists to put stands of bees in their orchards to insure better pollenization and fruit setting. The demonstrations which he carried out resulted in the placing of 3,000 stands of bees in the Wenatchee district in Chelan County, with a consequent large increase in the fruit crops.

PEST CONTROL

The control of grasshoppers and other field-crop insects, and of rodent pests of field and range creates perennial problems in the far Western States. The county agents, in cooperation with State and Federal specialists, are making the annual warfare well organized and systematic, and each year win greater cooperation from farmers and stockmen. Last year, in Maricopa County, Ariz., the county agent and the farmers joined to fight grasshoppers. The county commissioners appropriated $5,000 to purchase material for poisoned bait. The county agent conducted a systematic campaign. Bait mixing and distributing centers were set up in different sections of the county and supplied 760 farmers. Sixty-seven tons of bran, 2,690 gallons of molasses, 250 pounds of banana oil, and 6,700 pounds of crude white arsenic were used in preparing the bait. The farmers themselves applied the poisoned bait, distributing it over 56,500 acres.

Agents carrying on rodent-control work in Arizona enrolled 3,025 cooperators in 14 counties; 65,042 quarts of poisoned grain were used on 429,189 acres.

POULTRY

The grow-healthy-chicks campaigns are almost a nation-wide feature of the poultry extension work carried on by county agricultural agents. These campaigns strike at the fundamental problem of reducing the mortality among baby chicks and rearing vigorous pullets, free from disease and parasites, and capable of producing the largest number of eggs over a long laying season. The essential practices recommended, such as obtaining chicks free from pullorum disease, hatching chicks early, and rearing them in clean brooder houses on clean grounds, with clean feeding and management, have been adopted by thousands of farmers and poultrymen, and have resulted in a great reduction of mortality and in the production of pullets which lay more eggs.

County agents in Connecticut report a mortality of only 7 per cent of the chicks when the cooperators followed all of the eight recommended practices. In other States the average mortality of all chicks whose owners were enrolled in the campaign runs about 12 per cent as against previous mortality losses of from 30 to 40 per cent or more.

In New York 18 county agents are carrying on healthy-chick campaigns with 100 or more cooperators in each county. Kansas agents report 1,666 cooperators in the clean-chick program with an average of 88 per cent of all chicks being reared. Alabama agents report 106 demonstrations completed in 13 counties, in which 43,800 chicks

were involved and chick losses were kept down to 12.5 per cent. New Hampshire agents report 796 grow-healthy-chick cooperators raising more than 1,000,000 chicks in accordance with the recommended practices. County agents in New Jersey report that 1,325 cooperators were pledged in 1930 and began the season with 1,937,604 chicks.

ANIMAL HUSBANDRY

Hog parasites and diseases long have reduced the profits of farmers in the Central States. To meet this problem, specialists, agents, and farmers have united on four or five practices directed against these diseases and parasites. The extension workers have interested farmers in cleaning the sows and allowing them to farrow in pens or houses that have been cleaned and disinfected, and in moving the young pigs to clean ground known to be free of disease and parasites. They urged methods of feeding which would insure the most thrifty and rapid growth. The county agent of Holt County, Mo., reports that 123 farmers out of 135 enrolled, show records of 7.2 pigs raised per litter as compared with the county average of 5.7 pigs. These farmers were able to market 65 per cent of their hogs weighing 200 pounds at 6 months of age, as compared with the county average of 16 per cent so marketed. The Missouri agents report that farmers in that State docked and castrated 278,311 lambs in 1930, nearly twice as many as in 1929, thus helping the State to win the national lamb-improvement contest for the second time. This report illustrates what county agents are accomplishing in important livestock-producing counties.

FORESTRY

The county agents have given much time to teaching and encouraging farmers to apply good forestry practices on the farm wood lot and on idle or submarginal land. The wood-lot improvement work consists largely of teaching farmers to cull their lots systematically, removing ripe, crooked, diseased trees or trees of undesirable varieties, and thus maintaining the lot as a permanent and growing asset on the farm. The agents have had difficulty with this work because with high labor costs, or no local market for lumber, the farmer has been skeptical about the value of the recommended usage and practices. Similarly, in encouraging farm reforestation. the agent has had to meet the farmer's indifference to planting a crop which can only be harvested 30 years or more hence.

The problem of marginal and submarginal lands is acute in many areas. The county agent in Oneida County, Wis., found that 109,140 acres of land had become tax delinquent. Can the county take it over and reforest it? Several counties in New York have appointed assistant county agents whose sole work is in forestry.

AGRICULTURAL ENGINEERING

The prevention of soil washing and land erosion continues to be the most important agricultural engineering activity in all the Southern States. A sense of the need for erosion control is fast developing in many Northern States. The work of making farm and home life more comfortable by home conveniences and labor-saving devices

engaged both county and agricultural agents and home demonstration agents as never before. Obtaining electricity, and installing simple home water plants and septic tanks as prerequisites to modern home water and sanitary systems, are on the programs of hundreds of agents.

The vastness of the problem of controlling land erosion has impressed many county extension agents. Mississippi county agents report that in 58 counties 3,777 farmers completed terraces on 104,281 acres.

PROBLEMS IN EXTENSION TEACHING

County agricultural agents and specialists are improving their methods of teaching farmers. This improvement is evident in more systematic work; more detailed planning; use of a greater variety of teaching means and agencies; and in continuing the teaching on one problem over a longer period. The collection of more data on local situations and needs as a preliminary to diagnosing local problems, and the development of solutions which fit local needs and which are practical and economical, are also noteworthy.

One of the greatest advances is the effort to state practices recommended as solutions to local problems, in such form that each is an injunction and yet a practical, clear-cut direction which every farmer can understand. Generalities such as Plant shallow, Use approved varieties, Spray frequently, Use adequate amounts, are gradually abandoned for more specific directions which are kept before the farmer through a variety of agencies. Thus, "the path to more dairy dollars," which New York county agents are teaching, includes the following sharp, terse recommendations:

(1) Feed Holstein and Ayrshire cows 1 pound of grain to every 3½ pounds of milk.

(2) Feed Guernsey and Jersey cows 1 pound of grain to every 3 pounds of milk.

(3) Feed cows on pasture 1 pound of grain to every 5 or 6 pounds of milk.

(4) Plan to keep cows which, when 5 years old, produce at least 7,500 pounds of milk or 250 pounds of butterfat annually.

(5) Raise only the calves from those cows which give at least 8,500 pounds of milk, or 300 pounds of butterfat, annually.

(6) Keep a bull, the mother of which produces more milk and butterfat than the best cow in your herd.

The long-time campaign, based on teaching a large number of farmers to be successful with a limited set of new practices, is a feature of the work of many county agents. Such campaigns are based on the idea that learning is not an effort and a strain but a natural result of the individual's recognition of underlying problems and of their solution as an answer to his wants.

The county agents are rapidly learning to search for local data on situations and needs before advocating certain recommended practices. Agents who actually use farmers to survey and study local situations find that they have a real basis for diagnosing a local problem and can determine a solution which is practical and fitting. Then, too, through self-discovery and self-conviction, the farmers who take part in these preliminary studies, become stronger advocates of the solution recommended.

Several States, notably Illinois and Michigan, are using trained volunteer local leaders to teach other farmers certain recommended

practices. The gain in adoption of practices is noteworthy. Experience has shown, however, that care must be taken to teach only practices based on a real diagnosis of local situations and needs. Otherwise, stereotyped practices and projects may be recommended for situations which they do not fit, or local problems of great importance may be overlooked in the attempt to impart generalized or even formal knowledge.

There has been great improvement in the design and use of circular letters. Printed, illustrated letters, with their clean appearance, clear-cut appeal, and well-written subject matter, have shown many agents that the circular letter can be made one of the most convenient and economical means of reaching farmers. Agents are experimenting with other teaching aids, such as circulars, news articles, and news collumns, and are improving their use. (Fig. 4.)

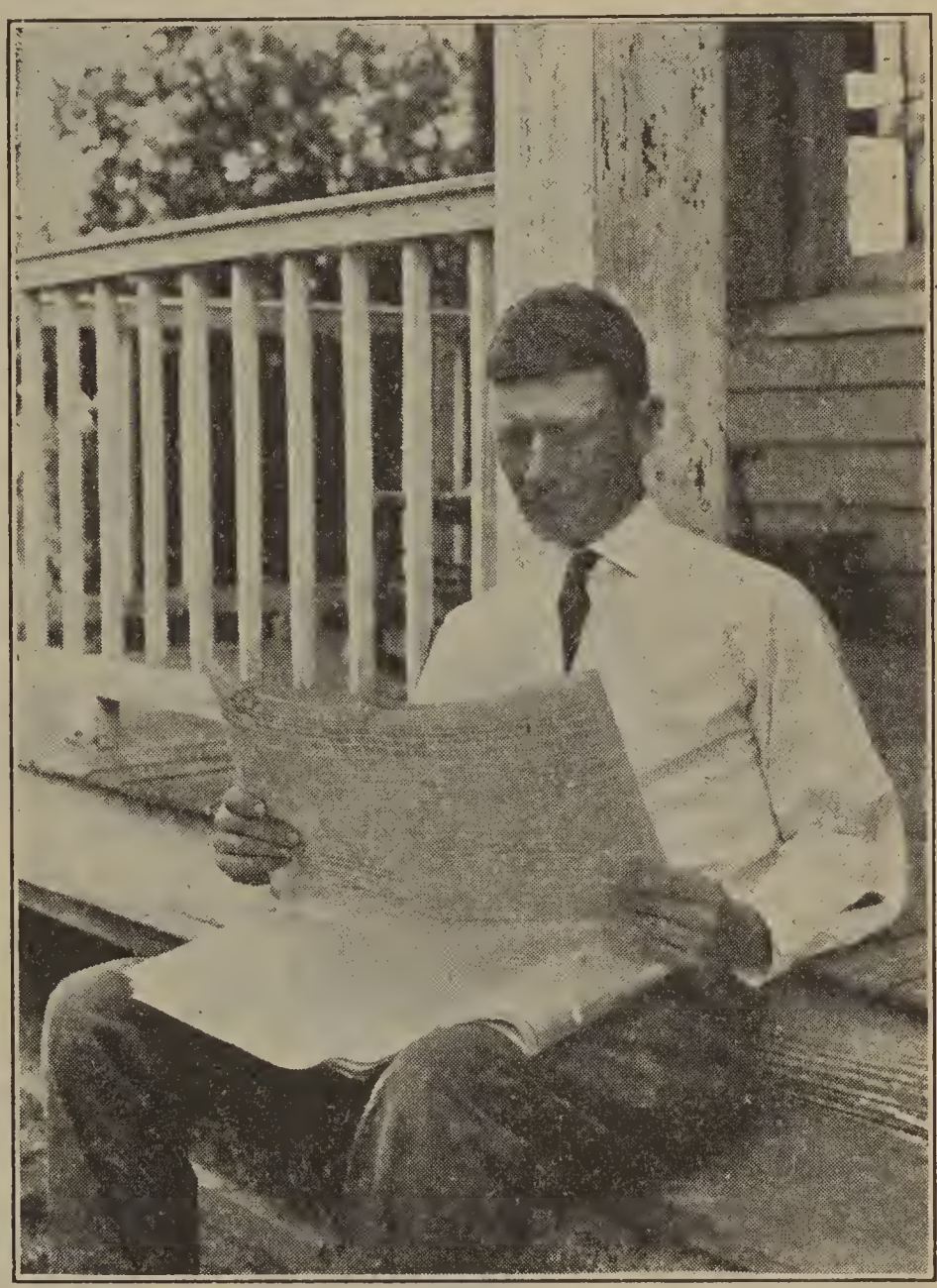

FIGURE 4.—Extension workers find news articles a valuable agency for giving information to farmers

The radio has found its place as an agency of great value in introducing recommended changes to large numbers of people, when used by extension workers to support and supplement a variety of teaching agencies.

The county extension agents are utilizing volunteer community committeemen with increasing effectiveness in sponsoring work, studying problems, finding solutions, planning the teaching, and encouraging their neighbors to join the ranks of those who are successful through following the extension teaching.

The tenure of office of county agricultural agents is growing longer in most States. Extension workers and others in many States are looking forward to the time when the salaries of the county agents will be paid entirely from Federal and State funds, and their expenses will be paid from county funds. Much still must be done to improve office facilities and conveniences for the county extension agent, and to provide him with clerical help.

Without a fully equipped office and competent full-time office help, few agents can give the service that farm people need.

One State leader in the East reports:

This office is becoming more and more a department which deals with county agent extension methods. As the years go by we are acquiring through experience and exchange of ideas with other States, a certain technic of adult teaching which is becoming more and more effective. When a subject is taught, we help to plan the work so that as much attention is given at least to methods in teaching as is given to the development of the subject matter. This system is resulting in a far greater spread of practice in the counties.

HOME DEMONSTRATION WORK

PROGRESS

A greater number of extension activities relating to the rural home and to rural life were conducted in 1930 than in any previous year. The keen interest and enthusiastic response from farm women throughout the country made heavy demands upon the Extension Service. That these demands were satisfied can be attributed to the following:

Increased number of county home demonstration agents. The total number of county and assistant county home demonstration agents employed on June 30, 1930, was 1,352, a 5 per cent increase over the previous fiscal year. (Fig. 5.) Of this number 127 were negro agents. There were also employed 202 home-economics specialists, an increase of 11 specialists over the number employed in 1929.

Increased responsibility assumed by county agricultural agents, in counties without home demonstration agents, in developing projects relating to the home.

More time and assistance given by State agricultural specialists in developing agricultural projects in which farm women are interested, such as poultry, gardening, home dairying, landscape gardening, and home engineering.

Greater stabilization in county and community organizations. Cooperative relationships in conducting home demonstration activities continued with increased satisfaction.

Noteworthy progress in the development of local leadership, providing a responsible source of assistance in furthering extension activities.

Attention given to State and county project plans, defining more definitely the organization, goals set, and methods of presenting projects. Systematic planning stimulated production of high-quality work and greater results. Programs and calendars of work made by State leaders, State home-economics specialists, and county home demonstration agents, have made possible more effective work and a larger amount of work.

Basing the home demonstration program in the community and county not only on immediate needs but on long-time development. Programs were discussed and planned in conference by farm people and extension workers, following studies and surveys in which farm people participated.

Enrichment of the home demonstration program by introducing such projects as design and color in clothing, house furnishing, and home arts and crafts; attractiveness of the farm-home surroundings and beauty in the countryside, appreciation of good music and pictures, selection of reading for the whole family, pageantry and plays for the community, and organized recreation for home and community.

Using more effective plans and methods each year in conducting home-demonstration activities. Such plans and methods are designed to reach a larger number and to give helpful publicity to the service.

Meeting emergencies quickly and effectively by adjusting the programs to take care of urgent needs in drought and flood areas.

In 1930 there were 34,959 organized groups of women who devoted their full program to home demonstration work, with 646,340

women enrolled, a 10 per cent increase in enrollment over that of 1929. The enrollment was reported as follows: 444,506 women, or 69 per cent of the total enrollment, by county home demonstration

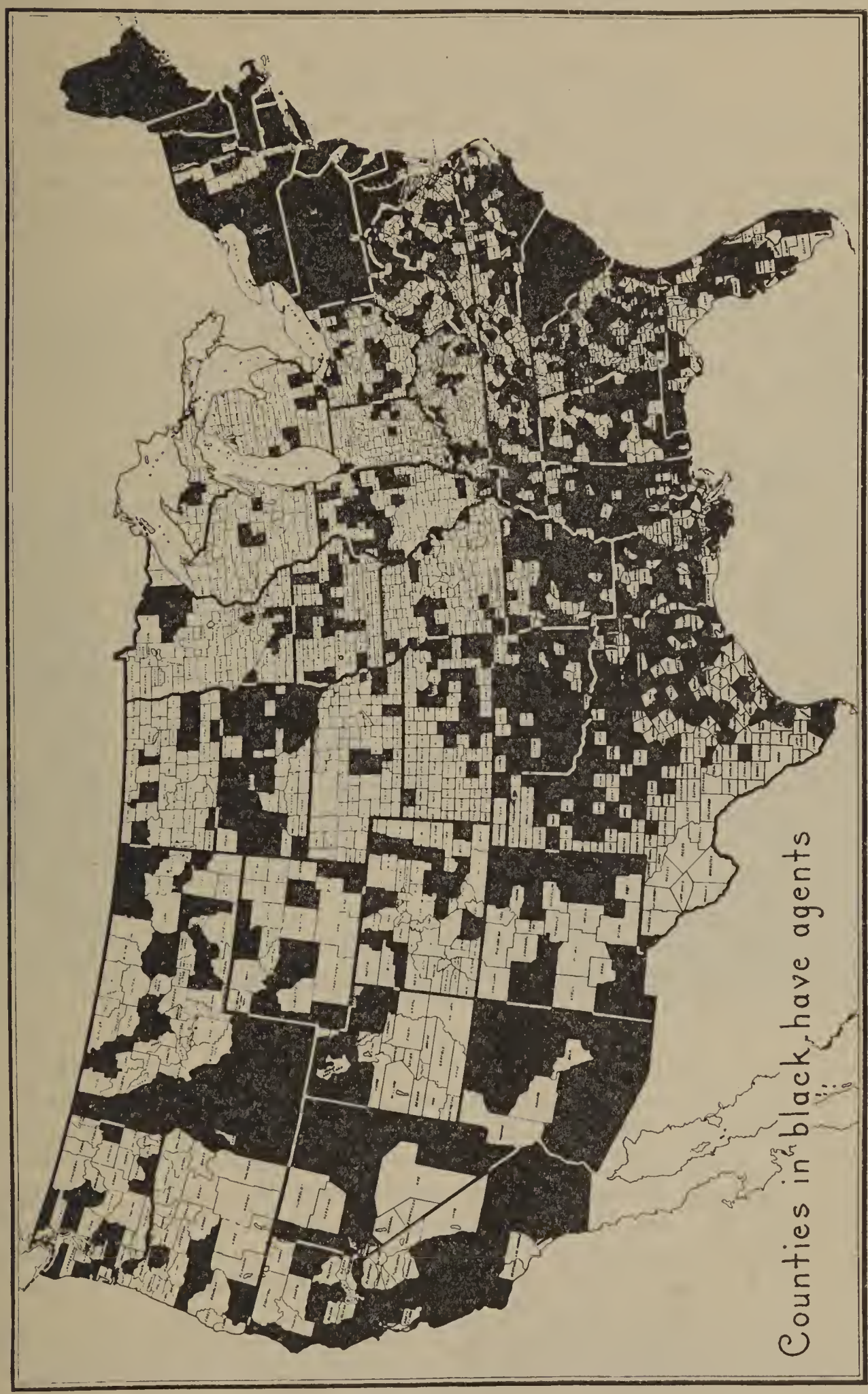

FIGURE 5.—Distribution of home demonstration agents

agents; 200,980, or 31 per cent, by county agricultural agents; and 854 by county 4-H club agents. Demonstration meetings held by home demonstration agents alone had a total attendance of 4,614,506 persons.

Home demonstration activities were reported by 1,198 county agricultural agents—51 per cent of all such agents. State home demonstration leaders and home-economics specialists assisted the agents in conducting the work, and local community leadership was effectively assumed by farm women.

HOME DEMONSTRATION WORK IN ALASKA

One of the newest developments of interest during the year was the organization of home demonstration work in Alaska. In 1930, seven groups of women were organized for home demonstration work and fourteen 4-H clubs for girls and boys were formed. The extension activities for women are largely in gardening, food selection and preparation, and food preservation. Some work in home improvement, in house furnishing, and in clothing construction has also been started. Clubs for young mothers are being organized to study child care. Home arts and crafts are being encouraged as a profitable use of leisure time.

HOME DEMONSTRATION WORK IN HAWAII

Creditable progress has been made in the home demonstration activities in Hawaii since the organization of the service in 1928. The groups of various races, including Hawaiian, Japanese, Portuguese, Filipino, Chinese, Chinese-Hawaiian, and whites, are involved in such work. The home demonstration agents in the four counties reported 942 women enrolled in 41 organized groups and 838 girls enrolled in fifty-four 4-H clubs in 1930. The home demonstration agents reported 909 meetings with a total attendance of 15,480. In addition 41 home demonstration and 4-H club meetings featuring achievement-day programs, exhibits, demonstration dinners, and recreation were held. Two demonstration tours, two encampments for women, and four 4-H club encampments were conducted.

The women and girls, especially the Japanese, showed enthusiastic interest in food selection and preparation. There were 619 women and 393 girls enrolled in food projects. All recipes used in the demonstrations were printed in Japanese newspapers as well as in English newspapers. Emphasis is being placed on a greater use of vegetables, fruits, and milk, and on their proper preparation. Making native fruits such as the papaya, mango, guava, and pineapple into attractive jellies and jams for home use and for market has been a successful enterprise with women and club girls in the Kona district of Hawaii. In 1930 there were 1,500 jars sold with promise of larger sales the next year. There were seven garden clubs with 150 women enrolled. These women introduced a greater variety of leafy vegetables into the home gardens. The home demonstration agents cooperated with the county nurses of the public health service in the preschool clinics by giving food-preparation demonstrations at the clinic. A large number of mothers with young children were benefited by these demonstrations, and the plantation managers often provided trucks to carry the mothers and children to the clinics.

PROGRAMS OF WORK

Throughout the country the farm women, with the guidance of extension agents, determined programs of work for their own communities after considering (1) a list of activities based on requests,

(2) the continuation of projects already under way, and (3) the needs of the community as analyzed by the group. The resources of county extension agents, the number of communities to be served, the tenure of extension work in the county, the kind and amount of State specialists' assistance available, are all factors which have influenced program determination.

County home demonstration advisory councils or committees functioned in compiling and setting up the county home demonstration program. (Fig. 6.) From the community programs the county program and goals are compiled, together with the indorsement and suggested emphases of the council. The county program pictures the home demonstration work of the year and is usually published.

FIGURE 6.—A county committee of local women planning the home demonstration program for the year

Informal county surveys for ascertaining the needs and wants of farm women were used to some extent in New York, Delaware, Maryland, North Dakota, South Dakota, and Montana. Their findings served as bases for discussion at program-making meetings of the county councils or county committees.

COUNTY ECONOMIC CONFERENCES

The group-discussion type of conference gives opportunity, under an organized plan, for free expression on the part of farm people. The 2-day county farm-home economic conference has proved popular. In such conferences farm women or men and women meet and discuss farm-home conditions and needs. The data obtained in advance by the surveys have been largely economic information on food; clothing; physical equipment, general conditions, and man-

agerial aspects of the home; and the cost of living. These data have served as good bases for shaping questions to be discussed at the conferences. Committees of farm women, assisted by both the home demonstration and agricultural agents of the county, by the State home demonstration leader, home-economics specialists, and several of the agricultural specialists, plan and conduct such a conference, the several steps in its development covering three or four months.

These conferences make recommendations and suggestions for solving economic needs, and set standards for farm living which accord with the ideals of the local people and the possibilities of the locality. Setting up goals or standards stimulates constructive thinking and desire for accomplishment.

Twenty-three county economic conferences, in which farm-home conditions and interests were considered, were conducted in 1930 in 10 States—Arizona, Colorado, Utah, Nevada, Washington, Wyoming, South Dakota, North Dakota, West Virginia, and Vermont. The conferences resulted in immediate or renewed emphasis being placed upon projects recognized by the discussion groups as meeting the needs of their counties. These recommendations have been considered by county councils and extension workers in setting up long-time goals. The cost-of-living budgets giving the amounts thought necessary to maintain the standards of living set up afforded interesting discussion programs for a series of community meetings.

PROGRAMS IN DROUGHT AREAS

Home demonstration work proved its efficiency in meeting emergencies in 1930 as well as it did during the World War. All forces in the severely drought-stricken regions were directed toward guiding and instructing the people in preserving any available foods for winter use and in maintaining a safe diet at minimum cost. Special attention was given to the prevention of pellagra. Home demonstration agents in North Carolina cooperated with the State department of health. In 27 counties they sent 486 pellagra patients to physicians and gave information on corrective feeding to 1,050 patients in 45 counties.

To avoid the necessity of feeding animals through the winter or selling them at very low prices, as well as to provide a winter supply of meat for themselves, farm families in the drought region canned large quantities of beef and chicken. Meat-canning centers were set up under the direction of extension agents. In these centers cold-storage facilities and screened workrooms with steam-pressure canners and mechanical can sealers were made available for the use of farm people. Rules covering the chilling of carcasses and forbidding the slaughtering of overheated or underfed animals were followed. In Arkansas home demonstration agents gave 1,437 meat-canning demonstrations in 1930, and local leaders gave 519. Farm families in Arkansas canned 272,251 pounds of beef. If the beef had been sold on foot it would have brought at that time approximately $14,123.13, whereas the canned products were valued at $58,057.38.

In areas where rains made fall gardens possible extension agents cooperated with relief organizations in intensified garden campaigns,

distributing garden seed, giving instructions for planting, and encouraging the canning of surplus fall field and garden products for winter use. Extension workers also assisted impoverished families in solving clothing problems.

LOCAL LEADERSHIP

Each year brings a noteworthy increase in the number of women who serve as voluntary leaders. In 1930 there were 103,151 leaders assisting in conducting home demonstration work, an increase of 37,223, or 57 per cent, over the number in 1929. The women who, without financial remuneration, gave time and effort to home demonstration activities and to 4-H club work with girls numbered 141,958.

FIGURE 7.—A local leader demonstrating baking at a meeting of a home demonstration club

These leaders felt repaid by the training and experience they gained, by the opportunity of association with extension workers, and by the satisfaction that came to them in helping their friends and neighbors. (Fig. 7.)

EXTENSION METHODS

After any phase of home demonstration work has been introduced into the community program, three distinct steps in the extension process are found necessary: (1) The presentation or suggestion that attracts interest sufficient to result in individual action; (2) the application of the information or improved practice by those who have become interested and who demonstrate in their own homes; and (3) an organized effort to bring the successful demonstration to the attention of a larger number in order to encourage a wider adoption of the practice and to obtain public interest and approval.

Methods of presentation vary in effectiveness under different conditions, and it may take several avenues of appeal to get the desired response—the adoption of the practice in the home. The demonstration lecture is used generally. The laboratory method of presentation has proved to be more effective. It is the participation of the women in the method demonstration, under the instruction of the extension worker. Visual instruction is used extensively. Such illustrative material as actual equipment and furnishings, models, photographs, posters, charts, and diagrams has been used with the lecture or with the method demonstration. Bulletins, pamphlets, newspaper articles, exhibits, lantern slides, motion-picture plays, pageants, and radio are used to reenforce extension presentations, and all play a part in inducing action. The number of radio talks made was 709, reported by 220 county home demonstration agents. Educational agencies and commercial interests have contributed generally to extension work in furnishing illustrative materials.

Demonstrations conducted by the farm women in their own homes are the most effective means of getting extension information and improved methods put into actual practice. There is a marked tendency toward use of the simple 1-unit demonstration which leads to larger and more difficult demonstrations. Closer supervision of these home demonstrations by extension agents and local leaders was encouraged in 1930.

It has been found that adults respond enthusiastically and effectively to contests. Kitchen and living-room improvement, vegetable and flower gardening, farmstead beautification, making house dresses, and writing news articles relating to extension work, are some extension activities in which contests for women were conducted in 1930. The closing events and presentation of awards were sometimes held in connection with county or district short courses or encampments. Score cards giving points which make up good standards have been used as a basis for judging in contests, and are increasingly used as a means of teaching good standards in food, clothing, and health projects.

Press articles, organized campaigns, achievement days, automobile tours, popular community programs, exhibits, plays, and radio programs have contributed toward bringing a successful demonstration to the attention of a large number of people. Automobile tours were popular and effective in directing attention to results obtained in kitchen improvement, house furnishing, gardens, and farmstead-beautification projects. Six hundred and twenty county home demonstration agents report conducting 2,090 tours in 1930 with an attendance of 118,041. Public demonstrations by teams of club girls were used to extend the influence of the clothing, food and nutrition, and house-furnishing projects. Home demonstration agents trained 15,889 judging and demonstration teams of 4-H club girls.

LEADING ACTIVITIES

FOODS AND NUTRITION

The project of foods and nutrition had an important place in the home demonstration program in 1930. During the year, 1,670 extension agents reported holding 84,176 method-demonstration meet-

ings featuring the several phases of the food and nutrition program, and 98,776 result demonstrations were completed or carried into the next year by farm women.

Standards of good nutrition, wise selection of food, and well-planned meals properly prepared and served, were generally emphasized in the foods and nutrition program in 1930.

The relation of food to health was given major emphasis in the several project phases, by extension workers who pointed out the alliance of good growth and development with correct food and health habits, gave information on the causes of overweight and underweight, and pointed out that many adult ailments are the results of faulty food and health habits.

Drought in certain regions and low prices for farm products in all regions led in 1930 to the important consideration of how to get the most for the food dollar. Meeting the needs of family health with lessened expenditure of money called for more careful study of food values, increased production of home fruits and vegetables, an increased amount of canning and other types of food preservation. It was reported that 73,396 families planned food budgets including the canning budget. Canning on the budget basis has become a general practice in a large number of homes.

The extension agents have been active in food and nutrition teaching for young mothers with preschool children, and in many instances have succeeded in bringing about school-home correlations to meet the nutrition needs of school children. A total of 69,403 homes improved the home-packed school lunch in 1930, and 5,913 installed the hot school lunch on the recommendation of extension agents.

HOME GARDENING

The chief objective in the home-garden demonstrations has been to increase the supply and variety of green and leafy vegetables, to produce enough vegetables and fruits to insure a canned supply for use through the winter months, and in some cases to increase the family income by the sale of the surplus not needed for home use. It was reported by 1,119 county extension agents that 64,703 adults completed home-garden demonstrations in 1930.

Twenty women in Gadsden County, Fla., kept accurate records of the kinds and amounts of vegetables used by their families and were surprised to find that the gardens had saved from $97 to $247 on grocery bills. State-wide garden contests were reported by Oklahoma, West Virginia, Georgia, South Carolina, Mississippi, Arkansas, and Florida. In Arkansas 2,716 women entered the year-round garden contest and 2,214 completed it in spite of drought during the summer.

POULTRY

The home-poultry project held an important place in the live-at-home programs, especially in the Southern States. In 1930 county home demonstration agents guided home-poultry demonstrations carried on by 21,616 women, 2,504 boys, and 31,345 girls. The extension workers have assisted farm families to develop their poultry flocks as means of supplying family needs and increasing farm income. The instruction has centered on improving the farm flock by

following a clean and healthy chick program, using artificial incubation when it is practicable, properly feeding and housing the flock, culling the flock, producing infertile eggs, and by preparing poultry and grading eggs for market. Poultry shows and egg-laying contests gave zest and interest to the work with poultry.

DAIRYING

"From a pint to a quart of milk daily for each member of the family for growth and health," a slogan which embodies a principle used in one of the score cards for nutrition projects, has been cited as indicating a vital reason for keeping at least one cow on every farm, under ordinary conditions. For a number of years, educational dairy work urging greater use of milk has been carried on by the extension service in States where there are not enough cows to supply the needed amount of milk. The home demonstration agent of Charleston County, S. C., reported in 1930 that satisfactory results had been accomplished during the last 10 years; that in 1920 there were 132 cows placed on farms where there had been none, whereas in 1930 only 7 were so placed. She also reported that 10 years ago there were no cows on the great majority of farms in the county, while in 1930 there was a cow on practically every farm.

In a few Southern States, home dairying was carried as a home demonstration project in 1930. Such phases as feeding and caring for the cow, clean milk production and cooling, sterilization of dairy utensils, and butter and cheese making were demonstrated.

CLOTHING THE FARM FAMILY

The clothing project led all other home-economics projects in enrollment in 1930, with 713 extension agents reporting 88,952 adult result demonstrations completed and 1,936 agents reporting an enrollment of 301,354 girls and 1,196 boys in 4-H clothing clubs.

In some sections economic conditions had a direct bearing on clothing the family. Fewer articles of new clothing were bought, and there was a growing interest in making old clothing look up to date. A total of 194,953 women and girls followed recommendations on renovating and remodeling, while only 125,313 women and girls followed such recommendations in 1929. Safe and effective dry-cleaning methods were emphasized as an economy measure in the clothing program in a large number of States.

Several States organized special projects in the economics and buying of clothing. Studies in better buying are made to familiarize the women with textile values, cut of garments, cleaning and laundering qualities, and standard sizes, and to make them more intelligent buyers.

Standards in the dress of farm people are higher than they were 15 and 20 years ago. This improvement is not due to excessive expenditure for clothes but to education in what is healthful, appropriate, and attractive in dress. Increased self-confidence and assurance have come with the higher standards.

In order to enable them to take inventory and to plan wardrobes to the best advantage commensurate with the money available for clothing, women and girls enrolled in the clothing projects have been

encouraged to set up clothing budgets. In 1930 such budgets were made by 13,889 women and 27,175 girls. Some had kept clothing accounts the preceding year, and therefore set up their new budgets on the basis of valuable experience.

HOME MANAGEMENT

Home-management extension projects involved the two major managerial problems of the home maker: (1) The management of time and energy and (2) the management of income or the material resources.

Among the demonstrations which had for their ultimate goal the conservation of time and energy were those of labor-saving home equipment; kitchen improvement and rearrangement; installation of modern water-supply, sewage, lighting, heating, and refrigerating systems; improved laundry methods; housekeeping methods and schedules; and conservation of time and energy. The extension projects in management of income were keeping household accounts, budgeting the income, buying, and studies on the cost of living which were carried on largely in connection with research projects.

Approved labor-saving equipment was installed in 40,896 homes in 1930, it was reported by 848 extension agents. The following items of comparatively expensive and permanent equipment were reported as having been installed according to recommendations: 4,211 water systems, 4,931 lighting systems, 3,911 sewage-disposal systems, and 639 heating systems.

Saving time for useful leisure is a matter that is being given serious consideration in the home-management projects in several States. This saving is sometimes accomplished by making a time schedule for the day's or week's work, comparing it with the time actually required for various tasks, and so adjusting it as to save a few minutes here and there. Many persons have been surprised to learn that thoughtful planning of farm and home duties provided time for many delightful interests, such as reading, entertaining friends, and more companionship with the children. Improved equipment and the allocation of home duties to all members of the family have also helped to provide this leisure time. Progress in this phase of home management was reported in 1930 by 405 extension agents, who stated that 23,554 women were following recommended schedules for home activities.

Home account-keeping was noticeably stimulated in counties where the county farm-home economic conferences were held, because the women wanted to check on the budgets set up in the cost-of-living discussion groups.

During 1930, 437 extension agents reported 13,801 women keeping accounts, whereas in 1929, only 10,591 were reported as making budgets and keeping accounts.

IMPROVEMENT OF HOMES AND SURROUNDINGS

The plans and suggestions given by extension agents in home-improvement projects have provided the maximum of convenience and attractiveness at the minimum expense. The improvements recommended ranged from doing over old furniture to planning a

new house. Women and girls appreciated information and suggestions on making the home restful and attractive; 47,320 adult result demonstrations were completed in 1930, and 91,247 girls and 729 boys were enrolled in 4-H clubs featuring house-furnishing projects.

The principles of good decoration and furnishing were applied in appropriate and inexpensive ways to living rooms and other rooms. One home demonstration agent in Florida thus described the results: "The living rooms in hundreds of Florida homes are now attractive gathering places for the family, and places conducive to the development of a 'higher life' within the home." This room-improvement work has often been stimulated by the rearrangement or improvements first made in the kitchen or the improvements made by the 4-H club girl in her own room, which often awakened the whole family to the need of general home improvement. The refinishing of old furniture, harmonizing colors, and proper arrangement of furniture improved the interiors of many homes. Such simple changes as discarding gaudy pictures, dyeing inexpensive drapery material, adding homemade rag rugs, and properly placing vases, lamps, and flowers, were keynotes of beauty in many humble but attractive homes. Where more funds were available more elaborate improvements were made. At least 150,000 women and girls made improvements in their homes in 1930, following the suggestions of extension agents.

The specialists in rural engineering have cooperated in the home-improvement program by furnishing plans for houses that were practical and appropriate for different localities. The reports show that the Extension Service assisted farm families in planning 1,824 new houses, and 2,883 were remodeled according to plans furnished.

Improvement of the home grounds, or farmstead beautification. made steady progress as an extension activity; there were 41,768 adult result demonstrations in 1930, while 14,364 girls and boys enrolled in yard-improvement clubs. Improving the interior of the home has in many cases been an incentive to beautifying its outside as well. The demonstrations usually follow a long-time plan and sometimes are under way for three or four years. They involve cleaning up and painting the entire premises, making open lawns, foundation plantings, using native shrubbery, planting trees where needed and flower gardens in appropriate places, and improving walks and roadways.

The same principles of landscaping have been applied to the improvement of school grounds and other public grounds as a community activity sponsored by the local home demonstration clubs or 4-H boys' and girls' clubs.

CHILD CARE AND TRAINING

Child care and training as an extension project has not passed the experimental stage in most States, but the response of parents and the growing demand for extension assistance in the subject by community groups attest its success in meeting a need in farm family life. Nine States employed specialists in child care and training in 1930; New York, New Jersey, Massachusetts, Georgia, Oklahoma, Illinois, Iowa, Michigan, and Minnesota. Nineteen States conducted extension work

in some phases of child care and training. Other States conducted some of its phases in correlation with foods and nutrition, clothing, or home-management projects. In 1930 it was reported by 218 county extension agents that 1,707 groups with a membership of 26,892 persons, devoted the major parts of their programs to child care and training.

The goal set up by the specialists in the field is "To enable parents to create an environment in which parents and children may have optimum development in a changing civilization." The instruction gives increased knowledge and understanding of the child, and as a result more time and systematic thought are given to its training. The groups are organized primarily for mothers whose children range in age from infanthood through adolescent youth. The instruction has been given largely by the group-discussion method, and has included specific assignments. Some meetings are held in the evening so that fathers as well as mothers can attend them. A series of 13 talks on child development and parent education was broadcast by the extension service of Oregon in 1930.

HOME HEALTH AND SANITATION

The educational work on health in which extension agents engage deals only with preventive health measures and with positive health. Much of this work is done in cooperation with various health agencies and health departments and is a part of the educational programs of such agencies and departments. The Extension Service has cooperated with State departments of health, especially in the preschool child-health clinics and in distributing publications on maternity and infancy.

Health and food-habit score cards have been helpful in teaching positive health standards to adults as well as to 4-H club boys and girls. In addition to proper living and food habits, complete health examinations, better care of teeth, correct posture, proper rest, and recreation have been emphasized. Evidence that the health and sanitation program has been far-reaching is found in the following report for 1930: 107,727 boys and girls were enrolled in special 4-H health clubs; 87,486 boys and girls were benefited by health-improvement and good growth and development features in the 4-H club program; 67,545 persons followed recommendations for complete health examinations; 68,987 improved posture; 162,942 reported that they had been immunized against contagious and communicable diseases; 19,946 adopted better practices in home nursing; 10,197 sanitary closets were installed; 17,664 homes were screened according to recommendations; and in 32,427 homes better methods of controlling flies, mosquitoes, and other pests were followed.

ORGANIZED MARKETING

Organized marketing was carried on in the form of egg-marketing circles, carload shipments of live and dressed poultry, exchanges, home-industries shops, parcel-post marketing, roadside stands, and curb or club markets. At such markets a large variety of products

is sold, including dressed and live poultry, eggs, dairy products, cured meats, sausage and lard, fresh vegetables and fruits, canned vegetables and fruits, jams and jellies, nuts, honey, baked goods, bulbs, cut flowers, potted plants, and other products. Extension agents have acted in an advisory capacity, giving instruction in producing and standardizing products and advising on organization and business management.

Organized marketing of farm products and crops, managed by farm women, was reported in 1930 by Delaware, Maryland, West Virginia, Massachusetts, New York, North Carolina, South Carolina, Florida, Georgia, Mississippi, Alabama, Tennessee, Kentucky, Arkansas, Ohio, Indiana, Oklahoma, South Dakota, and Montana. Sales by 29 markets in North Carolina amounted to $273,930. One of the largest marketing enterprises that have been managed by farm women with the county home demonstration agent as adviser is the curb market at Gadsden, Ala., organized in 1923. It did a business of $137,450 in 1930, having as many as 130 sellers on market days.

Thirty-six Maryland farm women interested in marketing made a marketing trip to New York City under the guidance of the extension service, visited the city's market terminals, and observed the grading and packing of fresh fruits, vegetables, and eggs.

A demonstration roadside market was set up during the State farmers' week in Arkansas in 1929, and demonstrations in grading, packing, and displaying were given. As a result of this demonstration, 24 women have established roadside markets in Arkansas. Similar roadside-market demonstrations were set up in connection with the Texas State farmers' short course and the Florida annual extension conference.

A study of how market money is spent by women who sell at the 28 club markets in South Carolina shows that most of the improvements made in the farm homes during 1930 were made possible by the market income. Some boys and girls went to college, and others received musical and other cultural advantages because of this extra source of family income.

HOME INDUSTRIES

Interesting and useful handicraft of high-quality workmanship, produced largely in connection with the house-furnishing project, holds a place in the home demonstration program. Women in several States have achieved such proficiency in color and design in useful and well-made articles that the articles have market value. Such articles are sold individually or by the arts and crafts associations and exchanges organized and managed by the women themselves.

An interesting and noteworthy development is the Apison rug-making industry of Tennessee. Ten years ago a few women and girls learned, under the instruction of the home demonstration agent, to make hooked rugs for their own homes. They made a special study of color, dyeing, and design. They did not go into business; they just grew into business. For nine months of 1930, in the Apison community, 100 persons, including women, girls, and men, especially ex-service men, were actively engaged in making rugs and mats;

500 rugs and 10,000 mats were made, and there were more orders than could be filled.

Perhaps the most remunerative home industry has been the production of the standardized preserved-food products put up in general utility containers or in attractive gift packages. Several Southern States have specialized in this industry. Texas reports that standardized home products are added to the market list each year. Some of the standardized food products sold in Texas in 1930 were fig preserves, strawberry preserves, sugar-coated pecan meats, grapefruit and orange marmalades, preserved watermelon products, roselle and mint jellies, fruit cakes, and steamed puddings.

These home industries are a form of expression for farm women

FIGURE 8.—A local leader instructing a group of farm women in making raffia baskets

who have creative art ability, and they have afforded a pleasant and profitable means of using leisure time. (Fig. 8.)

Another source of income to farm women is maintaining a tourist home. In West Virginia in 1930 were 11 tourist homes which measured up to definite high standards and carried the sign, "Mountain State Tourists' Home." A conference on the management of the tourist business was held under the auspices of the extension service of Vermont, the State department of information, and several chambers of commerce. Some of the subjects on the program were (1) presenting an attractive exterior, (2) making the tourist comfortable, (3) making the home restful and attractive, and (4) easy and satisfying meals for the tourists.

In New York the extension service cooperated in establishing one farm home in each of two counties as a demonstration tourist

home, with satisfying results. In the northern counties of Wisconsin a number of women are specializing in canned chicken and hooked rugs for the tourist trade.

COMMUNITY ACTIVITIES

Community achievement days, community clean-up and paint-up weeks, and organized recreation at playday events, tours, community fairs and exhibits, health clinics, and community libraries, were made successful by the united effort and cooperation of whole communities. A home demonstration club or group usually took the leadership in such activities.

The principles of landscaping used in improving home surroundings were applied to 3,552 school or other community grounds, where lawns, trees, shrubs, and flowers were planted. Groups of women who learned good principles in house furnishing and decoration extended their knowledge by improving the interiors of some of the community churches, halls, and rest rooms, and adding desirable features, such as better lights, safe and convenient entrances and steps, and kitchens adequate for serving community groups. Clubhouses and permanent camp sites to the number of 441, and 164 community rest rooms were established. Florida reported that home demonstration groups built or obtained 28 permanent clubhouses during the year.

Massachusetts, New Hampshire, Oregon, and California featured large community dinners as part of the nutrition projects. Families were invited. Live-at-home dinners, at which only home products were served, were popular county and community events in North Carolina, and 123 such dinners were held in 54 counties following one given by the governor of the State.

A community landscaping demonstration, staged in Arkansas, was one of the largest community enterprises in 1930. It included a contest in which only one community from any one county was permitted to enter. Twenty-five communities entered. In each community the whole undertaking was under the direction of the home demonstration club and its committees. General improvement was the object, and all homes of both white and colored persons were considered. Churches, schools, courthouses, stores, gins, filling stations, roadside markets, tourist camps, abandoned buildings, barns, machinery in the open, unsightly trash heaps and woodpiles, fence rows, crossroads, woods along the road, highways and roads—all were put in order or improved. The results were beyond expectation, and it is reported that the cooperative spirit developed will mean much for future improvement of these and other communities.

ORGANIZED RECREATION AND CAMPS

Recreation is no longer considered a frill on the extension program but a feature that deserves thought and planning. Farm women are taking the leadership in rural-recreation movements. Organized recreation not only helps people to become acquainted but it unifies groups so that they work better together. Women feel rested and joyful after playing games, dancing folk dances, or joining in com-

munity singing. In this frame of mind they respond better to the serious programs.

Home-talent plays as community activities were encouraged. New Hampshire and Wisconsin staged State dramatic contests or 1-act play tournaments. The contests between communities were held in the counties, and the State contest between counties was held during the State Farmers' Week. In Miami County, Ohio, two home-talent lyceum circuits with 11 communities participating were conducted.

Each year an increasing number of States are including music appreciation in their home demonstration programs and 4-H club work. Iowa and Nebraska have especially emphasized this feature. The music-appreciation project in Nebraska was started in 1925. Each month a circular is issued for the use of home demonstration clubs. The circular contains the words of 1 song to be memorized, the interpretation of some musical selection, and instructions for 1 active game and 1 quiet game. More than 20,000 circulars are issued each month. The song and game given in the circular for the month are also broadcast over the radio. In 1930 the home demonstration clubs reported 2,626 musical periods.

In Missouri 39 half-day recreational meetings, with 1,663 persons participating, were conducted by a specialist in 1930. There were 233 recreation meetings held for adolescent boys and girls. Music appreciation was part of the program of 270 clubs. Seventy-two clubs observed "music week."

The idea of out-of-door camps where farm women could rest, play, and learn materialized first in Montana, Tennessee, West Virginia, and Texas in 1921 and 1922. In 1930, 94,072 women attended 864 county or district camps in 28 States and the Territory of Hawaii. The camps provide a vacation for farm women, and such expressions as "this is the first night I have stayed from home in 10 years" are often heard in camp.

Some of the interesting program topics at the camps in 1930 were foods for summer, clothing accessories, color, shoes and feet, correct posture, personal grooming, citizenship, music appreciation, books for all ages, appreciation of good pictures, news writing, the State's history, and the native trees, shrubs, and flowers. Some of the simple handicrafts learned by the women during camp were tooling small leather coin purses, block painting on textiles, basketry, and painting and decorating magazine racks and hanging bookshelves. Such activities as hiking, swimming, spirited contests in songs and yells composed by the women, folk dancing, treasure hunts, stunts, and skits provided organized recreation and entertainment at these camps. Impressive vesper services and candle-lighting ceremonies were often held.

BOYS' AND GIRLS' 4-H CLUB WORK

In 1930 over 822,000 members of 4-H clubs voluntarily carried on demonstrations in livestock, farm crops, poultry, clothing, room improvement, gardening, foods, and the like, in their own neighborhoods. (Fig. 9.) Of these club members, 554,345, or 67.42 per cent, completed their work. These figures represent an increase of 8.81 per cent in enrollment, and an increase of 9.23 per cent in number of completions over the figures for 1929. (Table 4.)

TABLE 4.—*Enrollments and completions in boys' and girls' 4-H clubs in the United States, 1923–1930*

Year	Total enrollment	Completions		Year	Total enrollment	Completions	
	Number	*Number*	*Per cent*		*Number*	*Number*	*Per cent*
1923	459,074	249,416	54.3	1927	619,712	399,107	64.4
1924	510,355	283,283	55.5	1928	663,940	447,579	67.1
1925	565,046	329,574	58.3	1929	756,096	507,487	67.1
1926	586,156	368,305	62.8	1930	822,714	554,345	67.4

In 1930, 2,257 county agricultural agents reported club work with boys and 1,618 reported club work with girls. County home demon-

FIGURE 9.—A 4-H poultry club member with his flock of 200 Barred Plymouth Rocks and improved type of house

stration agents to the number of 220 reported club work with boys and 1,211 reported club work with girls. (Fig. 10.)

CLUB PROJECTS

Total enrollments of club members and successful completions of club projects may be used as measuring sticks of the effectiveness of 4–H club work.

Reports by all extension agents for 1930 indicated that 822,714 different boys and girls were enrolled in club projects. Of the projects started, 554,345, or 67.42 per cent, were successfully completed. Both boys and girls enrolled in each line of work, but naturally the larger number of girls chose those projects which pertained to home economics while the greater number of boys were interested in agriculture. However, the number of both boys and girls who carried

on activities relating to poultry, home gardens, handicraft, and health and sanitation is worthy of note.

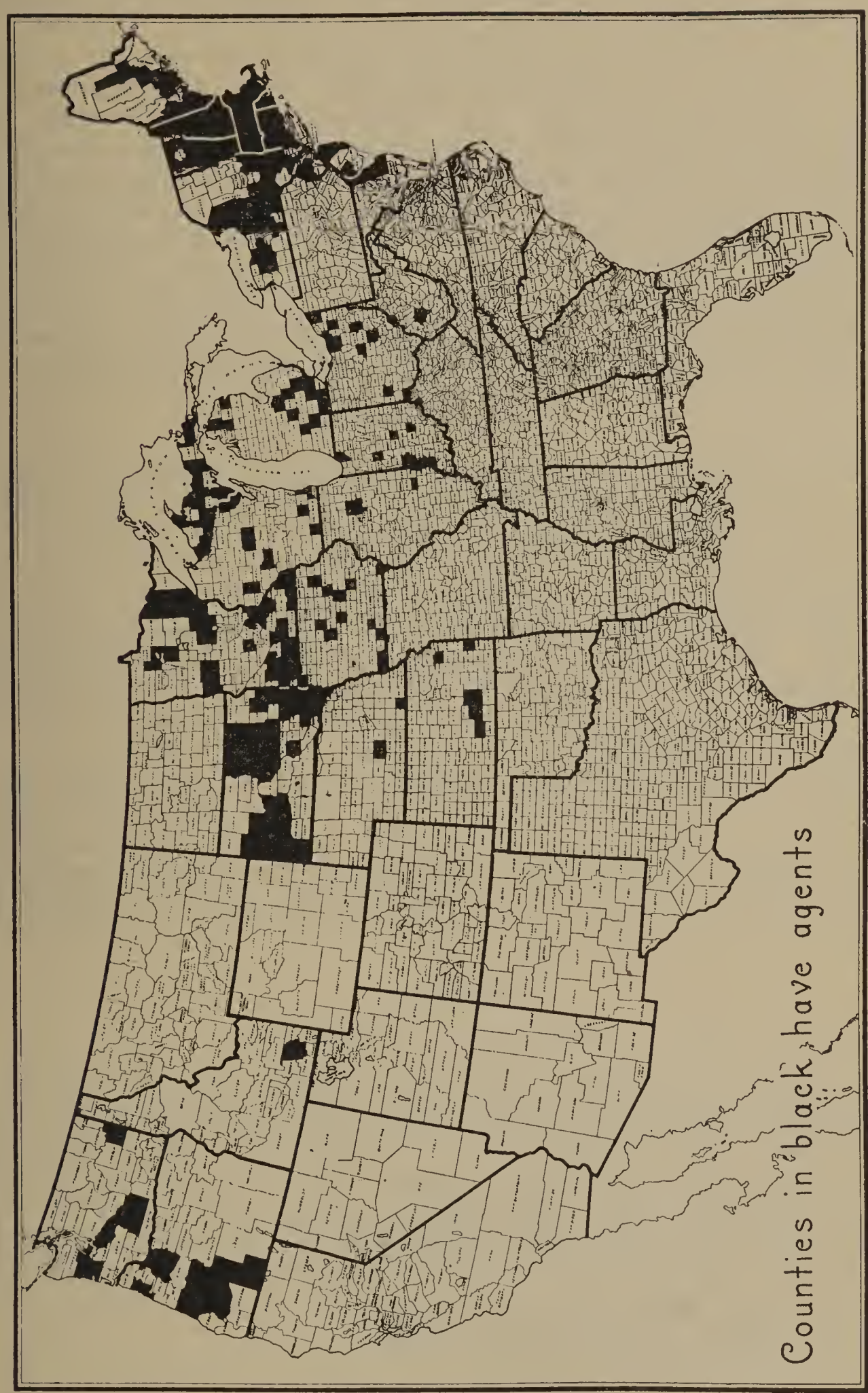

FIGURE 10.—Distribution of county club agents

LEADER CONFERENCES

The local or volunteer club leader was one of the most important persons in the supervision of 4–H club work during 1930, as in preceding years. All agents reported 85,344 local club leaders acting during the year.

County conferences provided a means of giving information to local club leaders regarding such items as program building for local clubs, methods of organizing and conducting clubs, subject matter, and the like.

State club leaders recognized the leader conference as a most effective means of increasing the volume and bettering the quality of club work in the counties. Such conferences better prepared the local leaders for their work. Some member of the State club staff or an extension specialist usually assisted the county extension agent in each conference. At these conferences, subject-matter training was given, a calendar of club activities for the year was prepared, and methods of organization were discussed. Often a good team demonstration was presented. Thus every local leader was better informed and obtained a clearer conception of the larger aspects of 4-H club work and of his part in the great extension program.

PLANS OF WORK

With but few exceptions the States reported more attention being given to making of county plans for conducting club work. These plans were usually prepared by the county club committee or council, or by a group of leaders and older club members meeting with the county extension agents and a representative of the State club staff. Making such county plans of work gave a better understanding of the whole club program to those participating in it. The States were almost unanimous in reporting that a better quality and a greater quantity of club work resulted in the counties where this method was followed.

Reports indicate that State club leaders participated more than heretofore in district conferences of extension agents. District supervisors provided greater opportunity for presentation and discussion of club work at such conferences. In a large number of States one full day, or one-half of the annual extension conference, was devoted to 4-H club work.

ACTIVITIES

ANNUAL 4-H CLUB WEEK

The reports of the State club leaders showed that all the States emphasized the importance of the annual gathering of club members at the State college of agriculture. In different States such meetings were known as 4-H short courses, 4-H round-ups, university tours, or 4-H field days. The purposes were to acquaint 4-H club members with their State agricultural colleges as well as to impart subject-matter information and to offer recognition for club achievement. In some States this annual event had grown to such proportions that district club weeks were held.

INTERSTATE ACTIVITIES

Aside from the national club camp, the principal interstate activities during 1930 centered about Camp Vail and the Eastern States Exposition at Springfield, Mass., Camp Plummer and the Pacific International at Portland, Oreg., the Tri-State Fair at Memphis,

Tenn., the National Club Congress at Chicago, Ill., and the National Dairy Exposition at St. Louis, Mo. Certain States participated in other interstate events in which but a small number of States were concerned.

PUBLIC PRESENTATION OF WORK

DEMONSTRATION TEAMS

There was a decided increase in the number of demonstration teams trained in 1930 as compared with the number trained in 1929. The total number in 1930 was 23,524. Extension agents found the demonstration team an excellent and usable method of informing the public of the work done by 4-H club members. Some States indicated that team demonstrations were considered one of the best means of teaching subject matter and also of maintaining the interest of club members. County extension agents also viewed these teams as an effective means of creating an interest in club work in sections of their counties in which no clubs had previously been organized. The fact that many more demonstration teams than judging teams were trained was worthy of comment.

JUDGING CONTESTS

Reports show that judging contests were held in connection with nearly every club project. A total of 12,533 judging teams were trained.

EXHIBITS AT FAIRS

The 4-H club work was presented at all the State fairs. Reports indicated a continuation of efforts on the part of State-fair managements to provide ample and suitable equipment for the club department.

County and community fairs again attracted 4-H exhibits, demonstrations, and judging-team contests. All these features aided in the public presentation of club work.

NEWS STORIES

The States reported using a wide variety of ways to present information on 4-H club work through the press. In most instances, the State club staff supplied the college or extension editor with information which he then prepared for syndicate, state-wide, or local distribution.

The Minneapolis (Minn.) Tribune, The Daily Huronite (S. Dak.), The Wichita (Kans.) Beacon, and The Independence (Mo.) Beacon, are but a few of the many daily newspapers which issued special 4-H club editions.

In most of the States, a column or a full page of each issue of the State farm paper was devoted to 4-H club work. Wallaces' Farmer (Iowa), The Nebraska Farmer, and The Michigan Farmer, run such departments.

Each State farm bureau paper carried either a column or a page filled with information supplied by the State club office through the extension or college editor.

Illinois, Ohio, and Nebraska, along with many other States, reported that news-writing training schools for club reporters were conducted in the counties by representatives of the extension editors' offices. These schools resulted in a large volume of news items being turned in to the local newspapers by the club reporters in the counties. Special county and State news-writing contests were reported in a larger number of States than during the previous year.

Metal road signs, placed on the mail box or gate in front of a club member's home, were reported by New York and Kansas as another publicity feature which proved worth while. It is probable that this method was used in a considerable number of States. In St. Louis County, Minn., one of these signs was presented to each club member who completed the year's work.

Certain States or counties issued 4-H club calendars, with items in the year's club program printed on the respective dates. In a number of States folders, booklets, and the like were printed for public distribution at county or State fairs and meetings of State organizations.

During the year a motion picture, of which the scenario was written by club members and the parts played by club members, was produced by a motion-picture concern in Illinois.

A considerable number of States reported making film strips and lantern slides based on their own club work.

Nearly every State made use of the printed or mimeographed County Club News issued from the office of the county extension agent. Usually these news-letters were distributed monthly to all club leaders and members and to other interested people in the county.

CAMPS

The attendance at club camps increased over that of the previous year. County, district, and State-wide camps were held. The number of 4-H camps was 2,898, with 60,371 boys and 75,313 girls attending. Much progress was evident in both the management and the programs at club camps. The Fourth National 4-H Club Camp was held in Washington, D. C., June 18 to 24, 1930, with an attendance of 238, representing 39 States.

GROWTH OR HEALTH ACTIVITIES

Nearly every State reported more and more attention being given to development of programs directing attention to the health "H" in club work. In most States health activities supplemented the usual club projects, but definite health projects were organized in a few.

MUSIC

During 1930 more attention was given to music in 4-H club work than had been given during any previous year. Music-appreciation and music-memory contests were continued, and more 4-H club orchestras, bands, and chorus groups were organized.

Missouri continued its song-writing contest which is sponsored by the State home demonstration agents' association. Out of this contest came the official State 4-H club song. Mrs. Harriett F. Johnson,

State girls' club agent in South Carolina, wrote and published in sheet music form a club song entitled, "The 4-H Clover and the Rose." This song was introduced during the national club camp in 1930.

RADIO

Leaders and members of 4-H clubs have been quick to recognize and use the opportunity which the radio provides for extending the influence of 4-H club work. During 1930, efforts to provide better radio programs were continued. Throughout the year, the United States Department of Agriculture and the State colleges cooperated in the national 4-H radio program broadcast on the first Saturday of each month. Mississippi reported that 42 counties used these radio programs regularly for club community meetings.

In Florida, Minnesota, Nebraska, South Dakota, Oklahoma, Oregon, Iowa, New York, Connecticut, Kansas, Michigan, Wisconsin, and other States, 4-H club programs were broadcast regularly from stations within the States.

RECOGNITION FOR CLUB MEMBERS

In various sections of the country, efforts were made to provide recognition for outstanding 4-H club members by means of organizations formed for that purpose. Michigan and Connecticut reported 4-H Service Clubs; Kansas reported the Who's Who Club; Maryland, West Virginia, the Carolinas, and other States continued the All-Star Clubs; Massachusetts designated its organizations as "Junior Directors" and "4-H Alumni Clubs"; and Vermont chose the name of "State 4-H Honor Society." In Rhode Island, the organization was known as the "Counselors," and Delaware reported a similar group.

EXTENSION WORK WITH NEGROES

Negro farmers in the South receiving extension assistance made consistent progress in 1930 in improving their economic condition. They learned to diversify their crop production intelligently, to market their produce more advantageously, to raise livestock more profitably, and to improve and beautify their homes. (Fig. 11.)

Fortunately for the negro farming people and the agents who work among them, both take readily to the demonstration idea; in other words, the negro farm family delights in a practical application of subject matter, whether it is mixing fertilizer, adjusting a plow, setting up terracing machines, pruning trees, making hats, remodeling furniture, making rugs, or framing pictures.

AGRICULTURAL WORK

Instruction was given in the following lines of agricultural practice: Agronomy, animal husbandry, poultry, dairying, animal diseases, horticulture, plant pathology, agricultural engineering, farm management, and marketing. Extension workers found the average negro farmer willing and eager to be taught better methods. This was true of both tenant and landowner.

What negro farmers accomplished in 1930 as a result of extension influence is shown by the results obtained by individual farmers

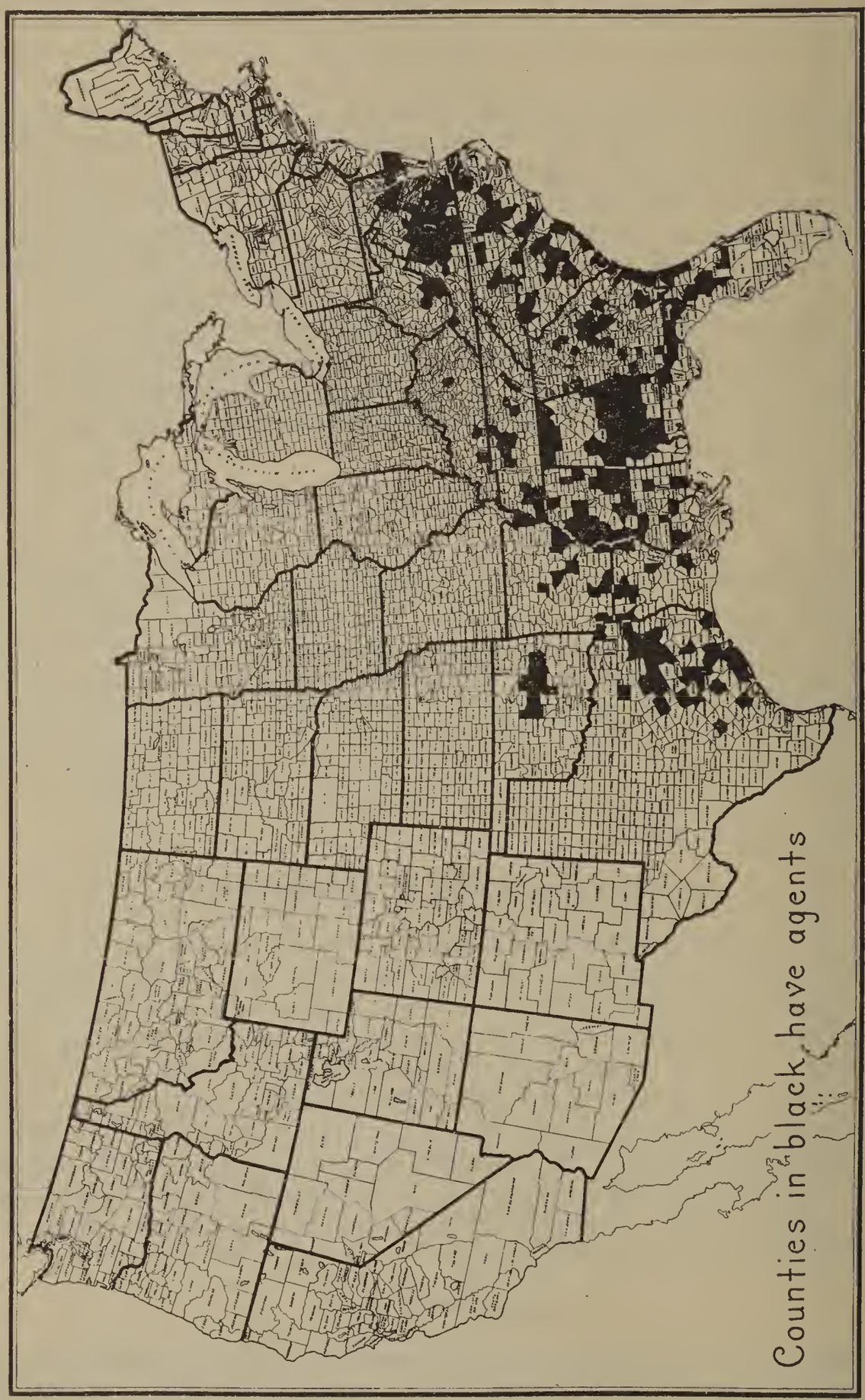

FIGURE 11.—Distribution of negro agents in counties

and by groups of men and women in communities where the work was carried on.

The old idea that negro farmers in the South, schooled in cotton growing, could not be depended upon to take care of cows, has become

obsolete. Reports similar to the following have come from practically every State where negroes work. Agent A. W. Roper, of Lowndes County, Ala., states:

The dairy industry with the colored people of the county is growing in a very encouraging way. Calhoun has been one of the new sections to start selling sour cream. Through a company in Montgomery, Ala., we succeeded in getting a testing outfit. In the Span Place community, 20 farmers with 176 cows averaged $696 in monthly sales. In Burkville community, 19 milkers with 175 cows had a monthly average return of $1,030. These two communities sold dairy products to the extent of $15,334 in nine months. The total milk sales by the colored farmers of the county for the past four years were as follows:

1927	$30,000
1928	60,000
1929	90,000
1930	54,800

Farland Sharpley, of Morgan County, Ala., made this report:

I sold $236.50 worth of milk and butter this year (1930), selling one and two times a week at the Decatur curb market, and occasionally at Harteselle. I got 20 cents a gallon for buttermilk and 40 cents a pound for butter. I milked three cows, two of which calved early in the spring. I fed cottonseed meal, hulls, and soybeans. The cows were kept on a Bermuda-grass pasture. The feed I bought amounted to only $36, leaving a profit of $200.

State Agent M. M. Hubert reports on dairy activities in Mississippi. Speaking of the Borden Condensery at Starkville, he says:

The price paid for milk during the month of April, 1930, was 47 cents per pound for butterfat. A total of $30,000 was paid out during that month. Approximately 47 per cent of this went to negro patrons.

Sam Williams, a farmer of Clarendon County, S. C., under the supervision of County Agent William Thompson, completed a remarkable demonstration with hogs. From a litter of 10 pigs, managed correctly, he fed out 2,035 pounds of pork in 152 days. The pork sold at 9½ cents per pound, bringing him $193.32. With this money he was able to pay his fertilizer bill. His success with another litter a few months later earned him enough money to pay his rent.

Recently A. C. Johnson, of the same county, made a litter of 10 pigs weigh 1,880 pounds within 180 days and earned $186.02. Silas Walker, of the same community, with a litter of 9 pigs, fed out 1,770 pounds of pork within 180 days. The pork sold for $169.61. These demonstrations were conducted with the advice of the agent. None of these farmers applied for Government aid during the drought. (Fig. 12.)

Murphy Robinson of Lowndes County, Ala., carried out a corn demonstration under the instruction of the county agent. His story follows:

My corn was grown on hammock land, well drained so that the water never stood on it to damage the corn. I bedded the land on the last day of January with a 2-horse plow. On the 17th I ran a 16-inch sweep. I followed this with my seed corn. I then bedded on the corn with a 2-horse plow. I pulled the bed down with a harrow.

The corn came up to a perfect stand. When it was 8 inches high, I thinned it out to 20 inches apart, one stalk to a hill, and plowed it again. When it was 20 inches high, I side-dressed the corn with 75 pounds of nitrate of soda to the acre. I plowed it again after this, making a total of three plowings. When plowed the last time, it averaged 4½ feet high.

From the 2 acres of land I harvested 136 bushels of corn, which is more than I usually get on 6 acres. The sale of this corn brought me $136. The cost of

production, including rent of land, labor, and fertilizer, was $31, leaving me a net profit of $105 on the 2 acres.

There is no question that the farm bureau in the South has played a larger part in aiding negro county agent work (where it has been given a fair trial) than any other single agency. The benefits which the negro farmer is deriving through this organization are far-reaching.

Never before has any organization invited negro farmers to share, equally with white farmers, the benefits in marketing farm commodities through buying and selling; and it is gratifying to note the response from large numbers of negro farmers. Reports from Alabama, Louisiana, and Arkansas indicate that an increased number joined in 1930, and all are satisfied. This shows what benefits may

FIGURE 12.—A negro farmer with his demonstration herd of swine

be derived from building up community spirit, breaking down the barriers of race prejudice and suspicion, and arriving at a better understanding between the two racial groups.

As soon as A. A. Hicks, county agent, Clarke County, Ala., found that the Federal money for the drought-stricken region was available, he made an effort to see that the colored farmers were benefitted. Negro farmers borrowed $2,750 of the total appropriation of $7,500. Agent Hicks, because of his efficient service, has been appointed a member of the county drought-relief committee with the task of keeping the white members of the committee informed on the condition of the colored people.

HOME DEMONSTRATION WORK

As the negro agricultural agents have succeeded in promoting better farm practices by men and boys, so have negro home demonstra-

tion agents aided in improving rural home conditions. The reports of home demonstration agents show an encouraging increase in the number of new or remodeled homes during the year. These homes represent almost a revolutionary change in living conditions. Women received extension instruction in clothing, food preparation and preservation, child welfare, and health and sanitation.

Probably no factor has contributed more to the unrest of farm families than unsightly, poorly arranged, and uncomfortable homes. In such environments women can not be happy and children can not be expected to become the highest type of citizens. Extension workers find that grown-up boys and girls often leave home because they become tired or ashamed of the poor environment.

The chief problems confronting the negro farm family to-day, are, generally speaking, those of food, clothing, and shelter. Lack of interior equipment to insure comfort in the home, unbalanced diet, and insufficient sanitary protection are phases of these problems. Other problems are lack of recreational facilities, and poor schools. Extension effort was systematically directed in 1930 toward solving these problems which, in a large measure, have arisen from a desire on the part of the people themselves for a higher standard of living.

Much of the credit for the development of the live-at-home program in extension service is due to the farm women and girls for growing and marketing vegetables and small fruits, caring for the dairy cow, selling milk and butter, caring for poultry, and marketing chickens and eggs.

Reports indicate that many farmers working under demonstration methods completely avoided debt and other privations in 1930 by giving more attention to the so-called "side lines," thereby enabling themselves to make the main crop without borrowing money.

FOODS AND NUTRITION

Commenting on the year's work, the Macon County, Ala., home demonstration agent says:

Our meetings are held from home to home. This method has its advantages. No woman likes for visitors to find her home disorderly. A club meeting at a home means that the house and yards are going to receive a thorough cleaning; for cleanliness is a strong point in the club. The meeting in the home also affords the housewife an opportunity to show off her accomplishments—her canned and preserved fruits and vegetables, rag rugs, made-over garments, or perhaps her new chicken coops, to the admiration of her fellow club women.

The program for the year is hinged upon one great need—the improvement of the family diet. The prevalence of pellagra bespeaks the need of variety in the everyday diet of the people. Though the farmer has the best foods at his command—milk, butter, eggs, and vegetables—they are too often improperly cooked and poorly served.

Along with this program for the improvement of the family diet, lessons have been given in poultry raising, egg preserving, butter making, and soap making, as well as demonstrations in home conveniences, such as fireless cookers, scrubbing traps, stocking mops, and bread mixtures. Demonstrations have also been given in home beautification, sanitation, and such homely subjects as laundering, house cleaning, and dyeing, cleaning, or making over old garments. Many dollars are saved to individuals when they know how to make an old serge suit into a 1-piece dress or an old cloak into a child's winter coat.

The most effective demonstration work done in Macon County from a monetary point of view, was the establishing of a curb market. Twenty-nine club

women, representing six communities, received $1,009 for their surplus garden and poultry products. The first market day was held the last of June, with 8 persons selling and 16 varieties of products offered. The market ran three hours a day, two days a week, averaging an hour for each work day. One club member reported having made $136 in three months' time. This was more than three bales of cotton brought, and it required six months to produce the cotton.

INCREASED INCOMES

The Morgan County, Ala., home demonstration agent says:

The sum of $1,512 came to the farm folks of the county this year from the Decatur curb market. Mrs. Julia Davis, of Nebo community, sold $422 worth of produce. Mrs. Mattie Tate, of Cedar Lake community, reports $319 gained. These women, like other sellers, were not able to lift any mortgages this year, but they did pay taxes, insurance, and grocery bills and keep the children in school.

The State home demonstration agent for negro work in Florida reports:

It is the aim of home demonstration agents to teach the country housewife how to live frugally on what she has, how to nourish the body, and how to balance a ration for the sake of economy and health. As the result of the efforts of seven negro home demonstration agents, 1,012 women were enrolled in home makers' club work and realized from the sale of butter and poultry the sum of $5,589.

Similar results were reported from hundreds of communities in other sections of the South. Ten negro home demonstration agents in Texas report having carried out 11,328 garden demonstrations, supervised the canning of 223,087 jars of fruit and vegetables, saved 60,000 pounds of pork, made 3,460 pounds of sausage, 5,200 pounds of lard, and 3,510 pounds of headcheese, put up 527 gallons of vinegar, and dried 439 pounds of fruit, at an approximate saving to the farmers among whom they worked of $31,500. This work was all done in one season, and before the advent of extension service such practices were unheard of. (Fig 13.)

HEALTH AND SANITATION

The home demonstration agent in Amherst County, Va., reports that her county is continuing the work of the state-wide sanitation campaign and that 28 toilets were built in and around Amherst, the county seat. Every public school and nearly every church now has two sanitary toilets. Rural home owners are also building toilets according to the State plan.

The screening of windows, inspired by the farm and home demonstration agents, is a great factor in making farm homes more comfortable and in making farm kitchens cleaner places in which to prepare the family food. A farm woman in Virginia said:

I didn't know that I could be so comfortable in a screened house. Now, I can go to sleep in any room in my house with no flies to bother me. I can work all day without having to fight flies, to say nothing about keeping them out of the food. My rooms were whitewashed last summer, but you can't see any flyspecks. I do not see why I waited so long for this comfort.

One of the most valuable adjuncts to home demonstration activity in Alabama for the last three years has been the work of a public nurse who travels over the State with the movable school and the

home demonstration agents, teaching practical sanitation and organizing rural health clubs in connection with regular organizations perfected by extension agents.

4-H CLUB WORK

The main projects carried on by negro 4-H club boys and girls in the South in 1930 were, for boys—cotton, corn, sweetpotatoes, potatoes, tobacco, soybeans, velvetbeans, oats, peanuts, strawberries, truck crops, hogs, poultry, and dairy cattle; and for girls—foods, clothing, millinery, home improvement, poultry, and gardening. Wherever 4-H club work has been introduced among negro boys and girls, they have taken hold with a zest unequaled in any other division of the work.

FIGURE 13.—A negro home demonstration agent demonstrating improved canning methods

Reports show that scores of boys and girls have made enough money from their club projects to pay their tuition at school, and many have substantial bank accounts. Public-spirited bankers and others have subscribed readily to prizes and awards for efficiency in club work. Such awards have included trips to State and interstate contests. Aside from receiving financial gain from their club projects, the 4-H club boys have been schooled in scientific agricultural practice such as properly preparing seed beds, properly applying the right kind of fertilizer, using well-selected seed, properly cultivating crops, and properly selecting, feeding, and caring for livestock.

In carrying out their projects, the girls have been drilled in the technic of good housekeeping, table setting, serving meals, launder-

ing, bed making, hanging curtains, framing and hanging pictures, renovating, and ridding homes of household pests.

Another outstanding example is given by T. M. Monan of Jones County, Miss.:

My communities are federated into a county organization. Early in the year, a county-wide meeting was held to outline a program of work for adults and juniors in the county. In this meeting the fact was revealed that there were several boys who were anxious to do 4–H club work, but had no way of financing their projects. I went with the officers of the county organization and conferred with a representative of the Commercial Bank at Laurel, Miss. An agreement was reached by which 46 boys were financed by this bank. Every one of them made good. Thirty-five of these boys averaged one bale of cotton per acre. George Johnson, of Moselle, Miss., took the lead in this work, using 1,000 pounds of fertilizer on his acre and harvesting 2,100 pounds of cotton. Drewell Currie came second with 1,800 pounds. On October 24, the 46 boys went, in a body, to the Commercial Bank and settled their accounts in full from the proceeds of their projects, and all of them had money left.

PROGRAM BUILDING

The methods followed in building programs for negro extension work are necessarily flexible. At all times an effort has been made to conform to local conditions. Groups of farmers are called together in their own communities and are consulted as to their needs. The needs are listed and on them as a basis certain projects for the year are planned and all farmers agree to work toward the goals which have been chosen. The community plans are combined into a county program; and after district and State meetings of county and home demonstration agents, the supervising agents make up a State plan of work. Of course, in some States there are exceptions to this rule. When it is considered that a large percentage of negro farmers are tenants living upon plantations, who have always looked to their landowners to make the yearly "arrangements" for them, it can readily be seen why program building is a slow process. There was a growing tendency in 1930 on the part of the white landowners, those living on their farms and those classed as "absentees," to welcome the services of negro extension agents in working out plans calculated to change the "advance system" to a cash system.

There is a marked improvement in the correlation of the agricultural agents' programs with those of the home demonstration agents among negro extension workers. In the past there has been considerable criticism to the effect that the agricultural agents and home demonstration agents, working in the same counties, were operating too independently of each other. Observation made on field trips throughout the territory, shows that there is less ground for this criticism now than formerly. A more cooperative spirit is gradually being built up between the two groups, while directors and supervisors of the work are insisting that the two agencies combine their efforts.

MOVABLE SCHOOL

The movable school has been very successful in creating interest among groups of farmers. It has proved a blessing in molding interest in more food production, more and better gardens, more poultry, better preparation of food in the home, preservation of fruits and vegetables, better homes, and sanitation. The simple and practical

demonstrations at such schools stimulate the interest of the negro farmer in his home and strengthen his attachment for it, even though he may not own it. The schools also stimulate the desire of the tenant to own property; they cause the country woman to learn practical lessons in thrift and more industrious habits in home making. The movable schools furnish a splendid opportunity for the people to do things for themselves, instead of letting the agents do the work for them.

NEWS SERVICE

Negro agents were unusually successful in keeping the results of their work before the public in 1930. Local papers and dailies readily printed items on successful achievements in negro extension work. Many of these items were asked for by the representatives of the papers. Representatives of business, religious, and civic organizations inspected and joined in demonstrations of successful farm and home club activities carried on by negroes. In some instances, sentiment in favor of extension work among the negroes was developed through the press to such an extent that agents were retained in the service in the face of local opposition that threatened to cause the extension work to be discontinued. A few negro agents have prepared pamphlets and magazine articles which have been accepted by publishers and the public.

COOPERATING AGENCIES

Negro extension workers under the Smith-Lever Act enjoyed cordial relationships with other agencies doing similar work, such as the Smith-Hughes teachers. There was little friction or misunderstanding between these two groups. Workers in both departments realized that the field is broad enough for them to work effectively without chance of duplication. In most States the Smith-Hughes and Smith-Lever employees are graduates from the same schools, a condition which naturally facilitates personal friendship and interest.

The negro extension service continued to enjoy a happy connection with State and county educational systems. This was evident especially in local club work. Many of the pupils were 4-H club members. The reports indicate that an increasing number of rural school-teachers are serving as club leaders and supervisors, especially in home demonstration activities. The home demonstration agents are of material value in assisting the teachers with their nutritional work, such as serving hot lunches, as advocated by educational departments. They have splendid cooperation in the matter of rural health and sanitation. County and State health departments have relied heavily on the negro extension service, recognizing that it offers a medium for making contacts not otherwise possible, and thereby furthering sanitation in schools and the homes of negro farmers.

A few States are employing negro nurses who work with the extension agents in child welfare and in combating major diseases, such as tuberculosis, typhoid fever, malaria, hookworm, pellagra, and venereal diseases, all too prevalent among rural people. Through

such cooperation, the extension service program is gradually being developed to a higher degree of effectiveness than would have been possible without the assistance of these other organizations.

Negro extension work could not have made such rapid progress without local support, such as that given by bankers, merchants, chambers of commerce, churches, and fraternal organizations. Banks have gladly financed negro boys and girls in their poultry, dairy, and pig projects. Without this aid these boys and girls could not have purchased their stock and equipment. Other organizations have given prizes to encourage better work among farmers and their children. These prizes have consisted of money, trips, camp expenses, medals, and other awards.

TRAINING OF AGENTS

In 1930, more negro extension agents than ever before availed themselves of the opportunity to study. A few have received academic degrees through periodic study since entering the service. A large number stationed near accredited institutions are attending night and summer schools. Through the influence of Federal and State officials, the whole group of men and women employed was this year granted a month's leave of absence for intensive study, made possible through the Rosenwald Fund, which also granted 20 scholarships for training supervisors of farm and home demonstration agents, and in agricultural economics. The winners of these scholarships are now in school on a year's leave of absence.

During the last three years the negro land-grant colleges have strengthened their courses in agriculture and home economics to meet the urgent demand for farm and home demonstration agents. Some of these schools are sending their upper-class students into the field to work with extension agents, and giving them full academic credit for such work.

The State agent for negro work in Alabama describes the system of introducing negro agents to their work.

> Before a new agent is placed in a county, he is required to come to headquarters, where every phase of the program of work is gone over in detail. He is then assigned to the movable-school force for a given period. There he learns how to make contacts with local people and how to demonstrate by seeing and helping others. We find that this method gives the new agent a clear insight into his duties. All vacancies and new positions are filled in this manner.
>
> For the general improvement of all agents already in service, we hold sectional meetings at least twice a year, including a 10-day short course. During this course we bring before them specialists from the department at Washington, Tuskegee Institute, and the State agricultural college at Auburn, to give demonstrations and lectures on the extension program. It is in this way that we try to keep the agents well informed.

The valuable information received by agents through short courses and summer schools has led to the use of new and more practical methods of instruction.

PERIOD OF SERVICE OF AGENTS

The period of service among negro agents is lengthening. This change is attributed in part to the raising of academic standards and the consequent better preparation of agents, and in part to the prom-

ise of better salaries, which enables the agents to look upon the extension service as a life work, and not as a temporary occupation. Many agents find that the extension service offers opportunity to pursue higher studies and other means of self-improvement. The home demonstration division of negro work still faces the problem which arises when the agents marry. Probably this problem can be solved only by employing older and more settled women. This plan, of course, would run counter to the general policy of not employing married women. The turnover in all branches of the service has been perceptibly reduced, and this condition makes the work more secure.

FARMERS' INSTITUTES

During the fiscal year ended June 30, 1930, farmers' institutes were officially conducted as state-wide activities in nine States. This number of States is two smaller than the number for 1929, which in turn was two smaller than the number for 1928.

Considering the amount of money contributed by the Federal Government for cooperative extension work in each State, and the State offset funds and county and private contributions, it is surprising that in 1930 in Iowa, farmers and others in the neighborhoods where institutes were held, contributed $23,109.79 to this work. This is $5,360.93 more than they gave in 1929, and about three times the amount of the State appropriation of $7,771.54 for farmers' institutes. Likewise, in Indiana, the State appropriation of $13,704.85 was augmented by private contributions of $19,456.07, nearly one and one-half times the State fund. Private donations of $4,825 in Illinois and $15,400 in Ohio, supplemented the large appropriations of those States for farmers' institutes. These instances show that in these four States at least, many farmers believe they are getting from the institutes some benefit not provided by other and newer phases of extension work.

No new developments or changes occurred in the conduct of farmers' institutes during the year. The extension division of the college of agriculture now has complete charge of farmers' institutes in each State except Iowa and Maine, where this control is vested in the State department of agriculture, and Illinois, where a State department of farmers' institutes conducts all such activities. These three exceptions, however, do not cause duplication of effort or a distinct or independent line of instruction, since each authority cooperates, and is closely correlated, with the organized extension service at the college of agriculture and with the agricultural, home economics, and club agent work in the counties, simply supplementing, reenforcing, and supporting the activities of these agencies.

INSTITUTES CONTROLLED THROUGH STATE DEPARTMENTS

In the three States where farmers' institutes are directed and managed by State departments 579 institutes were held covering 884 days, with 1,968 sessions attended by 272,274 persons. The instruction was given by 394 persons, of whom none was specifically reported as a member of the extension service, 35 were from experiment-station staffs, 2 from State departments of agriculture, and 11 were farmers and farm women engaged for this purpose because of noteworthy ac-

complishments on their own farms or in their own homes. The total cost of these institutes was $69,195.52, of which sum special State appropriations provided $41,260.73 and $27,934.79 was contributed by farmers and others in the neighborhoods of the institutes.

In comparison with the previous year's reports of farmers' institutes conducted by State departments, the reports for 1930 show an increase in the number of institutes, attendance, and amount of money expended, but a decrease in the number of days and of sessions held.

INSTITUTES CONTROLLED THROUGH COLLEGES OF AGRICULTURE

The six States conducting farmers' institutes under the direction of their colleges of agriculture held a total of 2,005 institutes which lasted 2,868 days, comprised 6,601 sessions, and were attended by 997,145 persons. They employed 259 instructors of whom 59 were members of the extension force, 15 from experiment station staffs, 9 from State departments of agriculture, and most of the remaining 176 were farmers and farm women engaged only during the institute season. The cost of these institutes was $106,813.27. Of this amount, $71,156.14 was derived from State appropriations for the purpose, and $35,657.13 from other sources, mostly local contributions by farmers and others near the meetings.

In comparison with the previous year's reports of farmers' institutes conducted by the colleges of agriculture, the reports for 1930 show a slight decrease in the number of institutes, days occupied, attendance, and money expended, but a slight increase in the number of sessions.

STATES HOLDING FARMERS' INSTITUTES

The nine States conducting farmers' institutes held a total of 2,584 institutes extending over a period of 3,752 days and comprising 8,569 sessions attended by a total of 1,269,419 persons. The instruction at these institutes was given by 653 persons, of whom 59 were members of the extension force, 50 were from experiment-station staffs, 11 from the personnel of State departments of agriculture, and 187 from other sources. Those from other sources were principally farmers and farm women engaged only for the institute season. They were selected because of their success and their reputations for having actually accomplished certain things on their own farms or in their own homes, under actual farm and farm-home conditions, as well as for their ability to tell others how they accomplished those things. Farmers have confidence in such instruction and are likely to appreciate it. They are more likely to put into practice the teachings of such persons, believing them to be more practical than those of college or extension workers. The cost of these institutes was $176,008.79, of which $112,416.87 came from State appropriations for farmers' institute work and $63,591.92 from local contributions.

In comparison with the previous year's reports of farmers' institutes conducted by both State departments and colleges of agriculture, the reports for 1930 show a slight decrease in the number of institutes held, days lasting, and sessions held, but a slight increase in attendance and in money expended.

Farmers' institute work differs in quality as well as in quantity in the several States. A detailed statement of the number of farmers' institutes conducted and the extent of their work during the fiscal year ended June 30, 1930, will be found in Tables 11 and 12, in which States are grouped according to the two sources of management.

SPECIALISTS' ACTIVITIES

INTRODUCTION

There were employed in the States in 1930 a total of 1,234 subject-matter specialists representing 22 projects. Working with them were 17 specialists representing 8 different bureaus within the Department of Agriculture.

During the year the following full-time workers were added to the group of Federal subject-matter specialists representing the Bureaus of Dairy Industry, A. B. Nystrom, Central States, and R. C. Jones, Western States; Public Roads, S. P. Lyle, extension engineer; and Entomology, M. P. Jones, Eastern States, and Fred D. Butcher, Central States.

The weekly conferences of extension workers in the Department of Agriculture continued with increased interest and attendance. A few outstanding subjects discussed were: Methods of Disseminating Outlook Material, The Ethylene Process of Coloring Fruits and Blanching Vegetables, Licensing of Fruit and Vegetable Dealers, How the Federal Government Assists the State Agricultural Colleges, Administration of the Pure Food Laws, Commercial Aspects of National-Forest Work and Their Application to Extension, and Immigration and Its Effect on American Agriculture. The purpose of these conferences is to acquaint the extension workers in the Office of Cooperative Extension Work with the other work of the Department of Agriculture. They are also intended to bring out suggestions from the extension administration group as to the adaptability of the work to the field.

Members of the specialists' group assisted in preparing visual teaching material, such as lantern slides, motion pictures, charts, and photographs to be distributed or lent to State extension services. They also stimulated interest in writing 1-act dramas, pageants, radio programs, and various other forms of teaching material originating principally in the States.

The specialists cooperated with one another and with the extension subject-matter specialists in the States in giving a greater economic content to their discussions and to the demonstrations. They also assisted in the economic conference conducted by the department and in the dissemination of outlook material. They accompanied persons from the administrative groups of the Office of Cooperative Extension Work who went into the field to assist in developing community and county programs of work in cooperation with State extension workers.

The severe drought in the Central and Southern States led many Federal workers to devise plans, in cooperation with the States, for emergency work, especially in nutrition, agronomy, farm management, home management, and animal husbandry; and because of the

general agricultural depression of 1930 many of the efforts of these workers were directed toward lowering the cost of production.

AGRONOMY

There was little change in the extension agronomy program in 1930, the work dealing very largely with seed improvement and the production of feed crops.

The work on feed crops was of great importance, especially in the States seriously affected by the drought. Normally, the feed program deals primarily with pasture improvement, feed grains, and forage crops. However, in the States affected by drought, the extension agronomists played an important part during the summer and fall in bringing about the planting of emergency feed crops, especially forage crops and emergency pastures, to carry livestock through the fall and winter and in making plans for the planting of emergency pasture and feed crops for the spring.

The work with legumes was seriously affected by the weather; in many States almost all the standard legume seedings, such as those of alfalfa, sweetclover, and clover, were lost. The two outstanding legumes that survived the drought were the soybean and the Korean Lespedeza in Kentucky and Tennessee.

The soybean proved its real value under adverse conditions, and was almost the only hay crop left on many farms. However, there are definite limits to the quantity of this crop that can be used, since at the present time there are only three principal uses for soybeans—for hay, for seed, and for vegetable oil.

Korean Lespedeza made a good showing in the drought areas of Kentucky and Tennessee. Reports from Kentucky state that all but two counties carried on some work with Lespedeza, and Korean Lespedeza stood out as being the hardiest, especially in the drought areas. It produced a fine hay crop of good quantity, and also a reasonably heavy seed crop.

Seed improvement continued to be one of the most important projects in agronomy, as it is the basis of all crop improvement under a well-organized agronomy program. In a number of States, advantage was taken of the drought to get farmers in many sections to use improved or certified seed for the first time. Many farmers who usually save their own seed were forced to purchase seed for the 1931 crop, and by taking advantage of this situation in time, the extension agronomists, cooperating with the seed-improvement associations, were able to furnish these farmers with the best seed available in the State, and at prices that were reasonable.

Reports indicate that some phase of seed-improvement work was carried on in 42 of the 48 States. Only six States, Connecticut, Massachusetts, Rhode Island, Vermont, Mississippi, and South Carolina, report no seed-improvement work, but Mississippi is planning to develop a seed-improvement program and a seed-improvement association. The first four States mentioned are seed-consuming, rather than seed-producing, and depend upon outside sources, principally New York, New Jersey, and Pennsylvania, for their seed supply.

The real value of the seed-improvement program is coming to be recognized more and more by the colleges, extension service, and

commercial seed trade. The associations are becoming better organized, their work is being correlated among States of the same section, and during the next two or three years there will probably be well-organized seed-improvement associations in all the important crop States. Three or four States, principally in the South, are developing the seed-improvement work, looking toward the organiza- and the control of soil erosion.

Weed-control activities are developing rapidly in spite of the small amount of investigational work being carried on. Many States have come to regard the use of chemical weed killers as an important supplement to good cultivation, rotations, and better cultural methods in the control of weeds. The cost of these chemical weed killers, and the lack of information on the best methods for their use, are retarding development in this phase of the agronomy work.

During 1930, agronomy work was carried on in 44 States by 113 specialists in soils and crops, of whom 12 devoted only part of their time to the work. Twenty-two States had 1 specialist each, 7 States had two specialists, and the remaining 15 States had 3 or more, the largest number employed in any one State being 11 in Michigan. No agronomy specialists were employed in the Territories of Alaska, Hawaii, or Porto Rico.

SOIL IMPROVEMENT

The soil-improvement work continued along the lines of developing better use of high-grade commercial fertilizers, the use of lime for soil improvement, the production of legumes and green manures, and the controlling of soil erosion.

Economic conditions caused a tendency to spend less money on fertilizers and lime, and in many States the extension agronomists assisted in developing programs whereby the farmers were able to get the most plant food for the least money. This was accomplished by developing cooperative buying of commercial fertilizers and the use of high-analysis fertilizers, making possible the purchase of larger amounts of plant food per unit of cost.

The lime programs in a number of States were not carried on so vigorously as in other years, partly because of economic conditions and partly because many States with the strongest lime programs were severely affected by the drought which not only decreased the income of the farmers, but also in many cases destroyed the new seedings of legumes, so that not nearly so much lime was used during the summer and fall as ordinarily. The work in Illinois is a good example. In 1929 approximately 900 000 tons of lime were reported to have been used in the State; in 1930 563,677 tons were used. The decrease was due, not to a smaller amount of work having been done on lime, but to economic and other conditions affecting the legume crops.

Encouraging the use of green manure continued to be an important phase of the program, especially in the Southern States, where progress was made in the use of vetch and Austrian winter peas as winter cover crops to be plowed down for green manure.

Work in soil conservation such as terracing and moisture control, has not received the attention that it needs. This activity is important in a number of States. Such States as Oklahoma, Texas, and

New Mexico are giving much attention to it. In many sections this is one of the most important projects and is the basis of the entire soil program. Without control of moisture and soil, not only is the moisture necessary to crop production lost, but in a few years almost the entire supply of available plant food and organic matter in the surface soil is lost.

HORTICULTURE

Home-landscape improvement and home-garden work led all other activities in growth in 1930. The home agents are carying on a large part of the work in both lines. Many county home agents have 100 or more home-improvement demonstrations, and some have as many as 300 garden demonstrations. Vegetable work is expanding, and several new positions were filled during the year in order to handle this growth. Fruit work is growing, and nut work is holding its own. The 4-H club projects have made some increase. Some State federations of garden clubs are bringing landscape improvement to hundreds of homes in cooperation with the landscape specialists. Several States employed landscape specialists in 1930 for the first time.

The lines of work were much the same as those of the previous year, with a trend toward more cost accounting and economics. One of the newer lines was that with greenhouse crops, particularly in Ohio, Pennsylvania, and Connecticut. Home gardens and home landscaping are demanding more attention than anything else. The use of contests in these two activities has multiplied the number of demonstrations. Changing to the best varieties of commercial apples in the New England States is accomplished by top-working trees of undesirable varieties, and the same method is used in changing to better varieties of pecans in the Southern States. The use of bees in orchards to cross-pollinate blossoms has been proved financially profitable, and is a recognized practice in many orchards. Pruning, spraying, fertilizing, cover cropping, fruit thinning, fruit washing, grading, and packing are other leading lines. Orchard spray rings are increasing rapidly in some sections.

In vegetable work the lines outstanding in growth and results are plant growing in glasshouses, use of certified seed and improved varieties, earlier planting of tomatoes for the cannery, insect and disease control, use of fertilizers, standardizing grades and packs, improved marketing methods, and growing home gardens.

The principal lines of work with nut crops are fertilizing and use of cover crops, cultivation, pruning, top-working of poor varieties and seedlings, and disease and insect control.

Landscaping extension is growing rapidly and includes the beautification of homes, schools, churches, courthouses, parks, cemeteries, auto camps, and county and State highways.

The spray services usually are carried on in cooperation with experiment-station or extension entomologists and plant pathologists. At different points in each State where a spray service is maintained, observation points are established and at these points the emergence of insects and the development of diseases are watched, so that fruit growers may be warned when it is time to spray. The warnings are telephoned or telegraphed to county agents, Smith-Hughes teach-

ers, chambers of commerce, bankers, or to other agencies which relay the information to the fruit growers. Well-developed spray services are maintained in Maryland, New Jersey, New York, Pennsylvania, Iowa, Wisconsin, Kansas, Michigan, Virginia, Arkansas, Kentucky, and Ohio.

Extension schools are growing in popularity and are among the best means of getting horticultural information to people who need it. Pecan schools are popular in Arkansas, Texas, and Oklahoma; grading and packing schools in Ohio; orchard schools in Wisconsin and Michigan; landscape and orchard and garden schools in Iowa; orchard and garden schools in Oregon; and canners' schools in Maryland and Arkansas. Pennsylvania had 121 tree-pruning schools, and Kansas had 97 schools in gardens and nutrition.

In practically all States cover crops are grown as a means of soil improvement for the production of fruits and vegetables. During 1930 demonstrations with cover crops were conducted on large areas in North Carolina, Missouri, Arkansas, Kansas, Oklahoma, Oregon, and Washington.

Manure hotbeds are not used so much as formerly because of scarcity of fresh horse manure, so small greenhouses and electric hotbeds are replacing them. Pennsylvania has built more than 700 such greenhouses and hotbeds in the last five years, Connecticut and New Jersey each has nearly as many, and Ohio is well supplied with them. In one house measuring 10 by 18 feet, 20,000 vegetable plants may be grown for spring outdoor planting.

California is again in the lead in cost accounting with 689 records. Of these, 233 were taken in walnut and almond orchards; 256 in apple, apricot, peach, pear, and prune orchards; 186 in citrus orchards; and 14 in vineyards. South Carolina made complete cost accounts on 312 gardens of one-half acre each. Kansas has records of 380 gardens which produced an average net profit of $97 each. In the sweetpotato work in South Carolina 209 growers obtained yields of from 94 to 339 bushels per acre at a production cost of from $32.29 to $88.37 per acre, with a profit per acre ranging from $14.45 to $156.49.

PLANT PATHOLOGY

Seed disinfection is an increasingly promising means of disease control. During 1930 the stinking smut of wheat continued to cause serious loss, both in reduced yields and market value, and its control by seed treatment was given continued attention by workers in about 30 wheat States. Seed treatment to control loose smuts of wheat and barley and covered smut and stripe of barley was demonstrated in a number of States. Treating sorghum seed for smut prevention is fast becoming an established practice in Kansas, so further demonstrations along that line are becoming less necessary. An increased number of tests showing profit from treating seed corn has led to that practice being recommended in several Corn Belt States. In Illinois and Delaware average increases in yield of 3 bushels per acre are reported. A tendency toward recommending some newer seed-potato treatments which are more rapid and fully as effective as the older formaldehyde and corrosive-sublimate methods, is noted.

The use of disease-free seed, especially of potatoes, sweetpotatoes, cereals, and various vegetables, was emphasized in all States. The use of resistant varieties is a growing means of disease control. In the case of many crops farmers were assisted in obtaining seed of such varieties.

Spraying is one of the most widely practiced of the various methods of disease prevention. Special spray service for the control of insects and diseases, based on weather conditions, and the development of host and parasite, continued to be given fruit growers in several of the Eastern States. Recent trends in this spray service seem to be (1) use of the radio for broadcasting recommendations, (2) more dependence on accuracy of weather forecasts, (3) extension of spray service to other fruits, such as cherries, peaches, and pears, (4) dependence on county agents or assistant county agents to operate spray service in the counties, and (5) the employment by large companies and groups of growers of their own spray specialists. In spraying potatoes and other field and vegetable crops more emphasis is being placed on the selection and adjustment of sprayers in order to do better work and obtain better results. The interesting fact was brought out in several States that even in a year of drought, when the blight diseases of potatoes were not present, yields were increased to a profitable extent by the application of Bordeaux mixture.

Plant-disease surveys for procuring facts on which to plan extension work and for checking results, continued to be an important activity of extension pathologists and others. Special wheat-smut surveys were conducted in the spring-wheat States and elsewhere. Tobacco-disease surveys in seed beds and fields were made in 19 States and Porto Rico by the Bureau of Plant Industry in cooperation with the States. Not only did these surveys accumulate important data to provide the basis of control work in 1931, but the personal contacts with the growers offered good opportunity for extension work.

The need for reducing the costs of crop production and for raising higher-quality products has resulted in more plant-disease control work being done by county agents and specialists in all States. Experience shows that the comparatively small staff of 26 extension plant pathologists is hardly adequate to meet the demand for technical assistance and that in certain States where there are no such specialists the teaching and research departments of plant pathology and botany are overloaded with extension duties.

FORESTRY

Extension forestry brought results in 1930 in spite of drought and the general depression. The extension foresters in the field have used practical knowledge and the experimental findings of the Federal and State forestry agencies, and have given practical assistance to farm and woodland owners. They received hearty cooperation from the State extension organizations and the active assistance of county agents in establishing woods demonstrations. Farm lands which have been idle or partly unproductive have been put to work to produce their proportionate share of the farm income.

The principal forestry projects during the year were planting, improvement cutting, marketing, fire prevention, and 4-H club work in forestry. Maple-sirup production, protecting the woods from grazing, sawmill improvement, and timber estimating received local attention.

Forest-tree planting continued to be the most popular work, especially in the mid-Western and Plains States where protection from wind is an important problem. New York and Pennsylvania continued to lead all States in the number of trees planted on farms. In a number of States there is a growing interest in tree planting for controlling erosion and for utilizing farm land not needed for crop production.

Improvement cutting and 4-H club work were carried on in 22 States. In a number of States 4-H club projects are designed to give a clear understanding of the elements of forestry. They cover such subjects as tree identification, tree planting, timber estimating, and woodland improvement. Camps, contests, club weeks, pageants, demonstrations, hikes, rallies, tours, and other events were held for boys and girls.

Profitable methods of marketing farm-timber products were emphasized during the year. Lists of timber buyers and bulletins on marketing were distributed. Illinois, Ohio, North Carolina, Tennessee, and New Hampshire gave practical timber-marketing assistance.

In California, Arkansas, and Mississippi, fire protection was demonstrated, and large groups of farmers took adequate measures to protect their woods from fires.

More effective methods to reach farm owners were used during the year. In Michigan a forestry train of three cars stimulated greater interest in the planting of trees. More than 25,000 people were reached. Among Ohio farmers notable progress was made in improving woodlands and protecting sugar maples from livestock. New Jersey obtained group action through the junior 4-H club educational work. Iowa junior forestry teams at demonstrations and fairs aroused a state-wide interest in planting windbreaks. Nebraska, New York, Pennsylvania, and Arkansas used campaigns with marked success. Field demonstrations, tours, camps, visits to State forests, parks, and experiment stations, circular letters, contests, news stories, exhibits, news-letters, lectures, and radio talks aroused much interest.

The State forestry departments supplied, at a nominal price, most of the planting stock used by farmers during the year. Extension foresters received helpful cooperation from State forestry departments, State colleges of agriculture, experiment stations, farm bureau federations, county and community agricultural organizations, State departments of agriculture, education, and conservation, nurserymen, women's clubs, lumbermen, railroads, and the press.

Thirty-two States and two territories cooperated with the United States Department of Agriculture under section 5 of the Clarke-McNary law of June, 1924, and the Smith-Lever Act of May, 1914, in forestry extension. Pennsylvania and New York had two extension foresters each, making a total of 36 subject-matter specialists in forestry.

ANIMAL HUSBANDRY

On an animal-unit basis, there was little change in the total number of livestock in the country in 1930 as compared with the total for the previous year. Increases in the number of cattle and sheep were offset by decreases in horses, mules, and hogs. However, the inventory value of the nation's livestock on January 1, 1931, as estimated by the Bureau of Agricultural Economics, had declined more than a billion and a half dollars, or more than 25 per cent, as compared with the value on the same date in 1930.

The influences responsible for such severe losses in the livestock business naturally affected animal-husbandry extension work to a considerable degree. The worst drought in a generation took its toll in decreasing feed supplies, including pasture. The surplus of wheat which lowered wheat prices and put that grain on a feeding basis, presented other new problems. Widespread bank failures emphasized the need for better methods of financing the livestock industry. The general business depression made it necessary to apply all known means of lowering production costs, in attempts to meet lower price returns. Live-at-home programs came into popularity almost everywhere. All cooperative efforts were stimulated by the economic situation.

Except for the large volume of emergency work which demanded attention during the year there was little deviation from the long-time program of work which has been in effect in most of the States for some time. Most of this work had to do with complete cycles of production and included all practices essential to successful livestock farming. This type of activity requires the cooperation of workers in other subject-matter lines and tends to unify efforts because it embraces a more or less complete system of farming. The pork-production clubs, an outgrowth of the ton-litter work, are an example of this type of activity.

The member of the newer type of pork-production club applies all the principles of improved swine production to all the brood sows, and their offspring, on his farm. In 1930 the demonstrators in one State produced 99 litters of pigs, which litters averaged more than a ton in weight at the age of 6 months. Demonstrators in the single-litter project, in which attention was concentrated on one litter of pigs, seldom produced more than 75 ton litters in any State in one year.

Demonstrations of both methods and results continued to be the backbone of efforts to extend the adoption of recommended practices. Meetings, tours, circular letters, news articles, and other means of publicity were used to increase interest.

Leadership personnel remained about the same as during recent years, except in the South. There several additional specialists were employed through funds made available by a special appropriation to the Bureau of Animal Industry for beef-cattle and related livestock work in areas recently released from cattle-tick quarantine.

DAIRY HUSBANDRY

The depression and the carry-over of dairy products made the dairy-extension work rather difficult during 1930. It was necessary

to reduce the cost of producing milk, not necessarily to meet competition but to help sustain consumption of dairy products.

Dairy-herd improvement as a long-time project has been given general attention. This work includes testing dairy cows, introducing better bulls, and keeping records to determine the best milk-producing strains and to furnish definite data which will enable dairymen to keep production costs at a minimum. In California 12.9 per cent of the dairy cows are under test. This State ranks highest in this respect. A considerable number of States hold State or regional conferences for testers. Farm-management and crop specialists and veterinarians, in addition to the dairy specialists, participate in these conferences.

Dairy-cattle breeding as a long-time project has been based largely on dairy-herd improvement records. The breeding work is handled in different ways in different States. In some States a state-wide campaign for the use of purebred sires is used. First, a survey of the sire situation in each county is made. This is followed by a campaign urging owners to replace scrubs with purebred dairy sires. Better-sire trains have been operated in a few States. Purebred-sire contests were held, cooperative bull associations organized, and dairy-cattle breeding schools held to interest dairymen in owning purebred sires.

Dairy-cattle feeding has received much attention, particularly in those States affected by drought. Feeding problems have generally been studied in conference with State specialists. In States where there was a shortage of feed, general information was given through circular letters, newspapers, and other avenues that would reach as many people as possible. In some of the Eastern States a specialized monthly feeding service has been developed. In States where the supply of feed was not a serious problem, farmers were taught to balance the individual cow's ration accurately. This instruction reached only a limited number of dairymen.

Milk-quality improvement work has been conducted in different ways. A sentiment demanding a good quality of milk had to be developed first. Two features have stood out—the relation of quality to demand and price, and its relation to health. The dairyman has quality control practically in his own hands. The dairy specialists have cooperated with creameries, milk-distributing plants, State boards of health, and with the dairymen themselves in determining what problems are to be attacked. This work has been particularly suitable as a 4-H club project. Outlines and programs for it have been prepared in several States.

POULTRY HUSBANDRY

Poultry-extension work covered both production and marketing problems in 1930. The decrease in the price of eggs and the unfavorable ratio of egg prices to poultry-feed prices caused many changes in poultry work. The reduced profits first halted the rapid expansion of the poultry industry.

Modern mechanical developments have done much to increase the number of poultry. Incubators that are practically automatic in their operation hatch a larger percentage of chicks than the old

sitting hen. Large brooders with temperatures controlled by thermostats enable the operators to keep big lots of chicks in a single unit. The newer knowledge of nutrition makes possible a more nearly balanced diet. These factors have had a tendency to put poultry raising on a factory or mass-production basis. The farm flock is still the most important source of poultry products, and in general the poultry-extension programs have aimed at improving the efficiency of these flocks. This has been done through a large variety of means and agencies. Meetings and schools have been held, tours organized, and bulletins, circular letters, and press notices prepared.

With a general decrease in prices of both feeds and poultry products, more attention is being paid to economical feeding. Several States have reported that increased numbers of farmers were grinding and utilizing home-produced grains in order to reduce the cost of feed. Remodeling old buildings has to a certain extent replaced the construction of new poultry houses. Three Southern States issued plans for a simple homemade brick brooder.

The extension workers organized 4-H poultry clubs and furnished them with a large amount of specially prepared literature. An added stimulus was given to this work by training demonstration and judging teams. Interstate contests in poultry judging and production are held in St. Louis, Chicago, New York, and Memphis.

One of the most extensive projects in poultry-extension work is based on the demonstration farm flocks owned by farmers who agree to follow recommended practices. Monthly reports are issued and include timely suggestions on improved practices and many valuable economic data. Centering around these demonstration farms is a campaign popularly called "Growing Healthy Chicks."

Poultry-extension work in 1930 was aided by six new motion-picture films prepared for the World's Poultry Congress exhibit and now released for distribution in the United States.

Extension work in poultry husbandry is carried on in all of the 48 States and in the Territory of Hawaii by the United States Department of Agriculture and the State agricultural colleges through the agricultural extension service. In 1930 1,589 county agricultural agents conducted 51,665 poultry demonstrations with adults. Directing the county workers in their poultry activities were 76 full-time poultry specialists and 5 persons who spent part of their time on this subject.

ANIMAL-PARASITE AND DISEASE CONTROL

Animal-parasite control is a new activity established by the office of cooperative extension work through the cooperation of the zoological division of the Bureau of Animal Industry. E. M. Nighbert was assigned to this work, and took up his duties November 1, 1930.

Parasites take their toll in work, meat, milk, wool, and eggs, and by interfering with health, normal growth, and development. They often cause the death of animals. As a rule, parasitized animals do not show fever or oustanding violent symptoms of disease, therefore their suffering may go unnoticed for long periods. There are no exact figures showing the actual loss from parasites, but observations and investigations indicate that their toll runs into many millions of dollars annually.

Extension veterinarians in 15 States are serving as subject-matter specialists in control of animal parasites and diseases of farm livestock and poultry. They deal principally with parasitic diseases and such infectious diseases as infectious abortion (Bang's disease) of cattle. Infectious abortion is controlled by measures requiring blood testing and isolation, sanitation, or slaughter. Parasitic diseases, such as roundworm infection in pigs, are controlled through a system of swine sanitation which requires that pigs be farrowed in clean pens or fields to avoid exposure to disease and worm-contaminated hog lots. Sanitary precautions are sometimes supplemented by medication.

The methods employed in teaching animal-parasite and disease control are educational meetings for farmers and stockmen, visual instruction, demonstrations, and organized efforts through the leadership of the State extension service, practicing veterinarians, State livestock sanitary officials, farmers, and others interested. Bulletins, leaflets, posters, press reports, exhibits, demonstration farm schools, and radio addresses are used.

A nation-wide parasite and disease control program is being organized and promoted.

ENTOMOLOGY

Specialists in entomology developed programs in 1930 that emphasized the importance of preventing insect damage rather than attempting control after damage had occurred.

Orchardists were given information as to the proper time to apply spray materials in order to produce fruit free of insect attack. In New York this service was also made available to truck growers who experienced trouble with insects.

The control of cutworms, grasshoppers, Hessian flies, cotton-boll weevil, and other insects attacking field crops was emphasized by the entomologists of the North Central, Western, and Southern States. In Nebraska large acreages were treated for the control of cutworms.

Specialists in Kansas and Iowa devoted time to the control of insects attacking livestock. In Iowa the control of horse bots, particularly the red-tailed bot, was handled through organized campaigns. In Kansas local leaders furthered insect-control work.

Apicultural extension activities included demonstration apiaries, disease control, study of the value of bees for pollinating orchards, and the organizing of beekeepers.

Extension specialists in entomology conducted, on the average, 156 meetings each. The average attendance at these meetings was 101. Direct contact was made with an average of 15,977 persons by each entomology specialist. The entomological extension programs dealt with the control of about 110 different species of insects.

Entomological extension work was conducted in 30 States with all or part of the time of 54 staff members devoted to it. Entomology specialists handled insect control and in some States apicultural and rodent control. Thirty-three full-time specialists were paid from extension funds in 19 States; 11 part-time specialists were paid from extension funds in 8 States. In addition, 10 specialists were paid from funds other than those of the extension services of the 8 States in which they worked.

98635—32——5

AGRICULTURAL ENGINEERING

The tendency to improve farm-labor efficiency by using larger power units per worker and by advancement in farm implement and machinery design, continued to be a dominant factor in the agricultural situation, even with no shortage of farm laborers. The low prices of important agricultural commodities due to world surpluses make it necessary to use farm labor efficiently in order that a margin of profit between cost of production and marketable value may be retained. Labor efficiency is often the determining factor in profitable production under severe competitive situations. During the year adult result demonstrations in land improvement, machinery, and building projects were conducted. Interest in 4-H club engineering projects increased. The junior projects included terracing, field machinery, gas engines, and shop work.

Promotion of hillside-drainage practices to prevent soil erosion is the major agricultural-engineering extension activity and is increasing in its importance and spread of influence. Terraces and soil-saving dams to prevent erosion were constructed at costs ranging from $2.50 to $10 per acre. Terracing is usually done at seasons when labor and power are not needed in production operations. Frequently increased crop yields pay the cost of terracing. Other land-improvement operations on lands already in cultivation include clearing stumps and stones and installing drainage and irrigation systems. Drought stimulated interest in irrigation for truck gardening in the Eastern States.

Farm-home life was improved by extension agricultural engineers who furnished plans for new dwellings and for remodeling houses, and gave information and recommendations resulting in the installation of lighting systems, water systems, sewage-disposal systems, and heating systems. Buildings for housing livestock, storing and handling farm products, and for other purposes were constructed or remodeled in accordance with plans furnished by extension agricultural engineers.

The increasing availability of electricity for farm utilities and conveniences, resulting from the rapid extension of power lines, has placed upon the extension service a new responsibility for acquainting farm users with the safe, profitable, and convenient use of electricity according to practices approved by experiment stations and other authoritative agencies.

FOODS AND NUTRITION

Organized projects in child feeding were more numerous in 1930 than theretofore. Since the children of many members of established home demonstration groups have grown up and left the farms, most States now combine the child-nutrition project with work on food selection and preparation, or on feeding the family or similar units. The general principles of these projects are definitely applied to the food needs of children, and attention is directed to the child-nutrition problems of the communities.

Interest thus aroused makes it feasible to carry on a child-feeding project as a second or third year project in the nutrition program, prefacing it with a special effort to interest young mothers who were not members of the original home demonstration group.

In some States specialists and agents visited typical homes in order to discuss, at first hand, the problems and needs of mothers of young children. In other States child feeding has been made a part of a composite project for such mothers, the project including clothing, furnishing, home management, and child training. Subject matter for such projects is worked out in conference among the specialists concerned.

Several States have sent out circular letters carrying advice on child feeding, care, and training. Such letters have gone directly to mailing lists of interested mothers. A few States used such letters as the only child-feeding project, while others used them to supplement project meetings or to extend the influence of the project. Home demonstration groups frequently sponsored preschool clinics, improved the lunches which school children carried from their homes, or promoted the serving of hot lunches at school.

There was a marked tendency in 1930 toward coordinating certain phases of the nutrition project with work in household management and in child training. Short projects on community meals reviewed food selection and preparation principles developed in earlier projects. Community meal contests, originally developed in certain Eastern States, were carried on by a number of States last year, and proved an effective means of bringing nutrition teaching before men as well as women.

Extension nutritionists assisted in standardizing recipes for various types of cooked food to be sold on home demonstration markets. A subcommittee of the extension nutrition committee undertook to summarize the contributions of State nutritionists and presented its report at the annual meeting of the American Home Economics Association in 1931.

Illinois, New York, Iowa, New Jersey, and Massachusetts, all having large, prosperous farms or extensive suburban areas, have pioneered in the field of food buying. Because of the protracted agricultural and industrial depression, intensified in some sections by drought, a majority of States modified existing food-selection projects or developed special projects to plan adequate low-cost diets. Guided by department and State extension nutritionists, agents in the South advised with planters, food merchants, and Red Cross committees on low-cost pellagra-preventive diets. Such discussions emphasized the economic as well as the health value of the live-at-home program. Many agents in other sections helped local relief agencies to plan low-cost adequate diets at local prices. More States reported joint garden and nutrition projects based on the food-selection and seasonal planting plans, for providing vegetables sufficient in variety and amount for canning, storing, and use when fresh. Food-preservation budgets adjusted to climatic conditions guided home makers in putting up enough of the right kind of fruits and vegetables to meet nutritional needs during nonproducing months.

The prospect of actual food shortage in the drought-stricken regions of 26 States inspired a feverish interest in growing fall and winter gardens, many of them from seed collections recommended by State gardening specialists and donated by the Red Cross. Gardening, the use and canning of vegetables, and the canning of poultry and meat animals to save feed, engrossed the attention of many home

demonstration agents in the drought-stricken States during the late summer and fall. In some counties additional canning equipment, to be used under the direction of the agents or of experienced club members, was made available by the Red Cross, by bankers, or other agencies.

Food projects for 4-H club girls, organized around the nutritional needs of the girl and her family, the girl's own health, the preparation of well-selected meals, the food-preservation budget, and simple entertaining, were outlined. Membership in 4-H food projects increased. Further progress was made in growth work, which received recognition in the resolutions adopted by club leaders at the National 4-H Club Camp in June, and was emphasized at State and county camps and short courses during the summer.

Extension nutritionists of the eastern region met in conference in February.

The information on food and nutrition projects, issued during the year, was improved in quality and volume. Feature articles, news stories, radio talks, local, county, and State exhibits, achievement days, campaigns, picnics, and tours were used. Local leadership was somewhat further extended. Health officers, relief agencies, parent-teacher associations, merchants, bankers, and others have cooperated liberally in the work.

A 2-reel motion picture for 4-H clubs, Good Posture Wins, was prepared in cooperation with Virginia extension workers. Special reports on extension activities in the child-development project and in the foods and nutrition project were prepared for the White House Conference on Child Health and Protection. As a member of the subcommittee on nutrition of the National Drought Relief Committee, the extension nutritionist collaborated with representatives of the Bureau of Home Economics, the United States Public Health Service, and the American Red Cross in preparing a mimeographed extension circular entitled "Buy Health Protection with Your Food Money," later revised for printing as Miscellaneous Publication 113, Adequate Diets for Families with Limited Incomes, a pellagra poster, and a small 4-page illustrated leaflet, Protect Yourself from Pellagra, of which last half a million copies were printed.

HOME MANAGEMENT

Home-management specialists developed programs on kitchen improvement, household economics, time management, the managerial responsibilities of the home maker, and the wise choice and use of electricity and other labor-saving equipment.

The long-time aims presented by extension workers have economic, physical, and social aspects. Spending the family income wisely and to the greater satisfaction of the family, discriminating between luxuries and necessities in purchasing, making the farm produce more of the home living, following better methods in doing household tasks, and studying the value of the housekeeper's time are economic problems. Remedying the lack of standards in farm-home building and meeting the need of water systems, better lighting facilities, and sanitary measures are the physical aim. The social problems require study of ideals in home making, an analysis of the

home maker's traits, and recognition of the obligations of the home maker to the community as well as to her family.

The home-management project is being developed in cooperation with the specialists in agricultural engineering, nutrition, farm management, clothing, landscaping, and child care and training. The procedure in developing the cooperative projects is much the same regardless of the subject matter involved. When work on water systems is to be undertaken, the agricultural engineers and home-management specialists confer and develop a plan of work. The home demonstration workers usually arouse interest in the project through kitchen-improvement work. The agricultural engineer then follows, giving technical information, and assisting interested cooperators with the details of installation, while the home management specialist assists the home maker in deciding where the water-system equipment is to be placed in the house. Both specialists and agents, through personal visits and other means, urge the completion of the project and give publicity to the demonstration through newspapers, circular letters, and tours.

In developing a cooperative project on "Buymanship," or household accounts, the home-management specialist and home demonstration agent start the work by giving the women a general background of the economic situation as it affects the home, and enroll the home makers in household account keeping. The food specialist then meets with the women and discusses wise food selection and the value of the home garden; the clothing specialist next adds her contribution in the form of information on clothing costs. Other specialists discuss the economic phases of their projects. The home-management specialist finishes the work with an analysis of the accounts kept during the year.

The home-management extension staff in 1930 included 42 full-time members employed in 39 States.

HOME FURNISHING

The objective of the home-furnishing work is to create a pleasing background in the home so that it may be conducive to the best physical and mental development of the family.

The human tendency to endure things as they are rather than to put forth the effort to change them, poor judgment in selecting furnishings, a lack of knowledge of fabrics and woods, a limited amount of money, and poor shopping facilities, are problems met by the home-furnishing specialists in their work with rural women and girls. (Fig. 14.)

The demonstration home continues to be the basis of good home-furnishing work. After a home maker indicates her desire to make improvements in her home, a meeting for the community women is held, at which the principles of house furnishing are discussed as they relate to particular problems in this home. Wall finishes, color, floor coverings, slip covers, and accessories may be discussed at later meetings. The home demonstrator carries out as nearly as possible the changes decided upon, and at a follow-up meeting or tour the neighbors and friends have an opportunity to see the improvements made. All of the improvements contemplated can not always be

accomplished in a year, so the home maker continues her cooperation with the extension specialists and agents over a series of years. Extension agents' reports speak often of such long-time demonstration houses and their value to the communities.

During 1930 the interest in problems relating to the wise choice of house-furnishing materials was so keen that extension staffs arranged tours to stores to study the buying of rugs, draperies, curtains, or other furnishings. Mention of "consumer purchasing" and "merchandising studies" appear frequently in the 1930 reports, and extension specialists have prepared many leaflets to answer questions on these topics propounded by home makers.

FIGURE 14.—An improved clothes closet in a 4-H club girl's bedroom

Every State has done some work on making the interior of the rural home more attractive and livable, though only 14 full-time house-furnishing specialists were employed in nine States during 1930. The work in other States is being developed by home demonstration agents, State leaders, or home-improvement or home-management specialists.

EXTENSION IN AGRICULTURAL ECONOMICS

Phases of extension work in agricultural economics receiving most attention and emphasis in 1930 were agricultural outlook and adjustments, farm organization and management, marketing principles and efficiency, land utilization, taxation, insurance, community organization, owner-tenant adjustments, and farm credit.

AGRICULTURAL OUTLOOK AND ADJUSTMENTS

Extension work dealing with agricultural outlook and adjustments had a healthy growth during the year, and the demands made for this type of information far outstripped the ability of the department to supply it. Both the State forces in economics and the individual farmers are making increased demands for accurate and

timely economic data. Outlook work is not considered a separate and distinct part of the extension program. It is closely coordinated not only with other economic work but with the entire extension program. The fact that outlook work was more than doubled during the year was due in large part to the greater stress placed on adapting and applying outlook information locally.

In addition to the National Outlook Conference five regional conferences were held during the year. The national conference enabled State workers to make contact with the many sources of information in the Bureau of Agricultural Economics, and with all other State workers. It is also the only means by which State workers can follow interregional adjustments. The regional conferences are a logical step in the development of a year-round extension program for disseminating economic information. They afford a means of making outlook information on certain commodities available in the different regions at the time when it is most valuable. They also afford a much-needed opportunity for further localizing outlook information and concentrating time and effort on commodities of major importance in the area. Through State committees and other means much information was carefully assembled and interpreted and brought to the regional conferences to supplement the national data. Plans were also more carefully organized for getting material to the county agents and helping them to train leaders to give it wide projection and application. Carrying out this plan brought about the best possible teamwork, through group effort, of State and Federal workers.

FARM MANAGEMENT

One of the outstanding activities of economic workers during the year was the development of present-day extension programs in terms of the farmer's business as a whole. Trends in the relation of production and marketing demands were studied and recommendations made for applying these trends to practices and systems of farming.

The application of good farm-management principles was taught, and stress was placed on the facts that provide an understanding of the types of farming areas and what constitutes good farm and enterprise organization and practice. The development of a satisfactory farm-accounting service was also emphasized in this program.

Much assistance was given in building good economics-extension programs. Through teaching the factors that make for success, there has been developed a marked appreciation of the value of a proper economic background when considering trends in the supply of products and in price variations. In cooperation with home-management specialists, facts on farm management, cost of living, and related matters have been so interpreted as to be of the greatest value to farm and home managers.

The farm-account project, one of the fundamental activities of all economics extension workers, is a major item in most States. Some of the means used to further this project were letters sent to carefully selected lists of farmers asking them to undertake the work, talks at farmers' meetings emphasizing its importance, schools for training in account keeping, help offered in farm-business analysis

at the end of the year, and showing the farmer how account keeping will help his business.

The special farm-account service project now under way in a number of counties in Illinois, Iowa, Kansas, and Minnesota, where farmers pay for an intensive farm-management service, is the result of demands from farmers for more assistance after cooperation with the county agent in the regular accounts project. Besides the general farm accounts, enterprise-efficiency accounts have received much attention in some States.

To facilitate better account keeping many States conduct accounting schools where details of inventory, receipts, expense-keeping, and farm business analysis are taught. In some States the rural schools are offering courses in simple farm accounting to seventh and eighth grade pupils.

The summary and analysis of accounts may be made at the State college or in the county agent's office and followed by visits to the farmer to discuss briefly with him the final summary of his preceding year's business. Sometimes the summary is mailed to the farmer, or he may visit the county agent's office to obtain it. Another very effective educational method is to hold schools in which groups of farmers are assisted in making their own summaries and analyses.

A great deal of work with young people has been done by extension specialists. Various 4-H club programs include training in the business principles that underlie farm activities.

MARKETING

During the year 1,685 cooperative-marketing associations were organized as compared to 1,089 the previous year. Assistance was given to 7,539 other associations, or about three times the number for the previous year. The membership of these associations was 857,148; the value of products marketed through them was nearly $300,000,000; and the value of supplies purchased through them was about $43,000,000. The problem of keeping members informed was the first to be given attention, and 3,410 associations were reported as being aided in its solution. The use of current information was second, organization third, business policies fourth, production to meet market demand was fifth, and standardization sixth. Help was also reported as being given on other problems: 38,808 farmers not in cooperative associations were assisted in standardization, 31,983 were assisted in packing and grading, and 95,983 were assisted in the use of current market information.

In many regions economic specialists have been successful in preventing the formation of unnecessary cooperative associations. Assistance in merging into larger units was given to 1,005 associations or groups. Special studies have also been made upon marketing opportunities and procedures, as well as upon collateral subjects such as credit situations, the extension of credit by car-door agencies, and the general outlook for financing marketing activities.

The interstate early-potato committee program, formulated as a continuous plan of action for reaching some effective solution of the potato-marketing problem, has been expanded to include Florida, Georgia, and South Carolina. The other States included are Maryland, Virginia, and North Carolina.

Because no one area could change the situation by itself the work of this committee has given particular emphasis to interstate cooperation and coordinating the efforts of all agencies interested in potato problems. Four subcommittees dealt with particular problems during the year. These problems concerned acreage and advance information, credit, substitute crops and enterprises, and marketing. Continuous contacts with the various interests associated with the potato industry were made possible by a complete mailing list of persons and organizations interested in the potato industry. This list includes growers, bankers, newspapers, fertilizer interests, cooperatives, supply merchants, and public workers. Special information is sent to these interested classes when it is available or necessary. In every area meetings were held at seasonal periods for discussions of production and marketing information, and practically all interests were represented at these meetings. This work is bringing about closer cooperation between the growers, marketing agencies, supply merchants, and others interested in a more profitable potato industry.

Since the establishment of the interstate early-potato committee other producing areas have shown interest in a similar movement. After careful consideration the agricultural interests in Washington, Idaho, and Montana established a Pacific Northwest potato committee in September, 1930.

ECONOMIC PROGRAM MAKING

Economic facts as a general background for the whole extension program were more extensively used in 1930 than in any previous year. The activities of the Federal Farm Board, the crisis in the price of many agricultural products, and the drought focused the attention of every one interested in welfare of rural people upon the economic problems of these people.

During recent years specialists in poultry, dairy, crops, and livestock have been asked to assist in formulating the State outlook reports for the enterprises in which they are interested. In 1930 an increased number not only gave this assistance but went into the field and presented the outlook data in regions where their enterprises were the principal sources of income. This procedure required that the economics and subject-matter specialists jointly consider efficient methods of production and decide what enterprise readjustments would bring the farmer the most profit. To this end both specialists required a thorough understanding of farming systems.

In many States the subject-matter and economics specialists conduct joint extension projects dealing with efficient management of enterprises. The methods and practices found to be more profitable become the subject-matter specialists' extension program for the enterprises involved. This plan of cooperation has also been extended to the county workers. These county workers are informed on subject matter and supplied with charts, leaflets, and outlines, so that they can present the economic data. In these programs the State leaders for county extension work and the directors of extension, as well as subject-matter specialists, have taken part.

Not only do extension workers concern themselves with efficient methods and more profitable systems of farming but they determine what volume and efficiency are necessary to provide the living that

farmers want for themselves and their children. The home-economics extension workers have studied the kind of living farm people want and its probable costs. As a result, their programs are being revised to meet more nearly the resources of the farm people. The young farm people also are getting a much clearer idea of the kind of living they can obtain from farming and of their opportunities for obtaining an equal or better living in some other occupation.

ECONOMIC EXTENSION PROCEDURE

Many ways and means were used to widely project and apply economic information. Improvement was made in preparing material for extension uses, in presenting it, and in coordinating all known methods of effective teaching. The following outline gives an idea of the procedure generally in use:

Outlook work (State and local)—(1) Preparation and distribution of outlook information; (2) county program-building committee work; (3) meetings and conferences; and (4) stimulation of cooperative associations and other farm organizations to keep members informed.

Farm management.—(1) Farm-management extension schools and meetings; (2) conferences for making farm plans and budgets; (3) enterprise-efficiency analysis; (4) farm-account keeping and analysis; (5) farm-management tours; (6) young farmers' and 4-H farm-management clubs; (7) community farm-management surveys and programs; (8) inventory and credit-statement campaigns; and (9) banker-farmer-merchant conferences.

Marketing.—(1) Marketing trips and tours; (2) marketing extension schools and meetings; (3) marketing surveys and program building; (4) grading and packing demonstrations; (5) business analysis and counsel for marketing agencies; (6) business management and accounting schools and conferences for managers and directors; (7) current marketing information; (8) improvement of marketing facilities; and (9) stimulation of farmers' organizations to keep members informed of economic conditions and results of research.

General.—(1) Owner-tenant adjustments (lease reforms); (2) land-utilization conferences and programs; (3) insurance; (4) taxation; and (5) correspondence courses.

In addition, assistance in connection with the foregoing activities was given through informational mediums such as radio talks, press articles, extension bulletins and circulars, and monthly economic publications.

EXTENSION STUDIES AND TEACHING

STUDIES UNDERTAKEN

Research in extension methods continued to receive major emphasis on the part of the office of cooperative extension work and cooperating State extension divisions in 1930. In addition to analyzing, summarizing, and preparing reports based on the studies undertaken in South Carolina, Kentucky, and New Jersey during the previous year, other studies were initiated in Kansas and Missouri. In Kansas data were obtained on the progress made by the wheat program intensively carried on by the extension service for five years. At the same time data were also collected on two home-economics projects—clothing, and health and sanitation. In Missouri similar data were collected on the legume program as conducted in somewhat different ways in eastern Missouri counties. A total of 1,180 farm and home records were obtained, making a grand total of 17,121

farm, home, and leadership records collected by this unit of the office in cooperation with the State extension services during the eight years such studies have been conducted.

Further studies of the educational values in 4-H club work were made during the year. An analysis of the circular letters used by extension workers was made, and some light thrown upon the problem of reaching more of the farm women who do not affiliate with the formal home demonstration clubs.

With the assistance of W. W. Clark, assistant county agent leader in Wisconsin, whose services were lent to the office for the purpose, marked progress was made in studying the functions and activities of that large group of extension workers charged with responsibility for supervising the county extension agents and their work. When completed, the report of this study is expected to be a valuable contribution to extension literature.

CIRCULAR LETTERS

In analyzing the use of circular letters by extension agents, particular attention was given to the authority mentioned for the subject matter contained in the 2,353 letters studied. Approximately 44 per cent of the letters carried subject-matter information. The opinions of agents and specialists furnished the basis for at least part of the subject-matter information contained in 92 per cent of the letters. The successful experience of a farmer or farm woman in the community was narrated in 6 per cent of the letters, and in 3 per cent a result demonstration was cited. Work of the experiment station and the United States Department of Agriculture, the method demonstration, and agencies outside of the extension service were each mentioned as authorities in less than 1 per cent of the letters.

REASONS FOR NOT JOINING A HOME DEMONSTRATION CLUB

Recent studies of home demonstration work in Kentucky, New Jersey, and South Carolina provided information on the possibility of enrolling in clubs or otherwise influencing the 447 farm women in the areas studied who had never been affiliated with a home demonstration group. That they had no way to get to club meetings was the outstanding reason given by women in all three areas for not joining a home demonstration group, 36 per cent of the women mentioning this reason. Lack of interest in the home demonstration club program kept 20 per cent from joining. Fourteen per cent of the women reported that they had no one to care for their small children during their absence from home. Thirteen per cent reported lack of time to attend meetings. Their own poor health or that of other members of the family was the reason given by 10 per cent of the women. Six per cent stated that no club had been organized within reasonable distance. Two per cent, each, reported advanced age, objection to attendance at club meetings on the part of members of the family, and unsatisfactory meeting places, as reasons for not having joined a home demonstration club.

EDUCATIONAL VALUES IN 4-H CLUB WORK

This study was handled in three parts, one dealing with opinions of county extension workers, one relating to club members, and one dealing with opinions of parents of club members. Of special interest are the statements of boys and girls on how they have been helped by club work. Self-reliance, knowledge of up-to-date farm and home practices, higher appreciation of farming as a life occupation, and participation in community affairs are some of the more important ways in which club members think they have been benefited by club work.

VALUE OF AN IMPROVED PRACTICE

For the first time in an extension field study, information on the economic value of adopting improved practices was obtained. The farmers studied who adopted no extension practices obtained an average yield of 9.40 bushels of wheat per acre, whereas the group of farmers who did adopt improved wheat practices obtained an average yield of 11.84 bushels per acre. The rate of increase in yield per acre, 2.44 bushels, applied to the 370 acres of wheat grown per farm in the practice group, gives a total increase of 903 bushels of wheat per farm due to extension influence.

TRAINING COURSES FOR EXTENSION WORKERS

Beginning in 1929 the Federal Extension Service, through the division of extension studies and teaching, has cooperated with the University of Wisconsin in developing professional training courses on the graduate level for extension workers already in the service. Much of the material for such courses is drawn from the various studies of the office of cooperative extension work. During the summer of 1930 two courses in extension methods were given by the head of the division. One of these was a repetition of the course given in 1929. The other was an advanced course designed primarily for those who had taken the 1929 course.

A total of 37 students were enrolled in the 1930 extension courses, 31 of whom were experienced extension workers. These students represented 12 States and 1 foreign country: Maryland, Massachusetts, Vermont, and Pennsylvania in the East; Arkansas, Georgia, and Oklahoma in the South; Montana and Oregon in the West; and South Dakota, Wisconsin, and Missouri in the Central States. South Africa was represented by two graduate students from the Union Department of Agriculture.

COURSES FOR NEGRO EXTENSION WORKERS

During the summer of 1930 three special schools for negro extension agents were held. The schools were located at the agricultural colleges for negroes at Orangeburg, S. C., Nashville, Tenn., and Prairie View, Tex., from August 4 to 30. They were made possible through the financial aid of the Julius Rosenwald Fund, of Chicago, which appropriated $20,000 to help finance them. These funds were used to pay the salaries of teachers and to purchase the necessary equipment for teaching. The plan of organizing and conducting the

schools was a cooperative arrangement among the Federal and State extension services, the white and negro land-grant institutions of the South, and the Julius Rosenwald Fund. These schools were under the general supervision of J. A. Evans, associate chief of the office of cooperative extension work. E. H. Shinn, as active director, gave considerable time to organizing and directing the schools, and prepared the report on them which was published by the Rosenwald Fund.

About 300 of the 325 negro extension agents of the Southern States attended these schools. The teaching staff was composed of both white and negro teachers and extension workers. The courses offered included poultry husbandry, dairying, agricultural economics, agricultural engineering, extension methods, home management, and foods and nutrition.

INFORMATION AND VISUAL INSTRUCTION

Extension publications continued in 1930 to be an invaluable aid to county extension agents in extending information and in supplementing subject matter disseminated in connection with meetings, office and farm visits, and correspondence. A trend toward brevity, appropriate illustration, and more attractive make-up in the preparation of new publications was noted. County extension agents reported distribution of 6,657,561 publications during the year. The publication output of State extension divisions in 1930 included 2,016 printed documents, consisting of 265 bulletins, 445 circulars, and 1,306 miscellaneous publications. The office of cooperative extension work prepared for publication the annual report on cooperative extension work for the year 1928 and two department circulars presenting extension activities and teaching methods of interest to extension agents.

In May, 1930, the department Extension Service issued the first number of a printed house organ entitled, "Extension Service Review." Throughout the year, the Review has carried stories of extension accomplishment, results, and methods designed to furnish definite assistance to extension workers in conducting their work. It was evident by the end of the year that the periodical was aiding materially in the exchange of ideas and the coordination of effort in the extension field. The Review is distributed without charge to all cooperative extension employees, and has a subscription rate of 50 cents a year for others.

The office of cooperative extension work contributed 26 mimeographed circulars to the Extension Service series of circulars during 1930 and issued 348 mimeographed miscellaneous publications dealing with various matters of interest to extension workers.

NEWS SERVICE

County extension agents reported preparing 449,854 news stories in 1930. There was a noticeable improvement in the quality of the news stories and their adaptability to press use. Instruction in news writing received by agents in 1930 and in previous years was bearing fruit. The most effective instruction of this character reported was that given by the extension editors in extension conferences of agents

and in direct personal visits to the counties. Agents who had received instruction in elementary news writing in college almost invariably produced high-quality news stories.

No record of the total number of news articles prepared by State extension divisions was kept, although in most States, a considerable output of news stories by the extension editor were released to local dailies and weeklies and syndicated to press associations. In making extension information available nationally, the office of cooperative extension work cooperated with the department press service in assembling and preparing 150 articles for the Official Record and for press release. There were also 1,200 news photographs released and material was collected and made available to 77 representatives of farm papers and magazines, and syndicate and free-lance writers.

VISUAL INSTRUCTION

Staging and taking photographs for subject-matter lantern-slide and film-strip series was continued by the office of cooperative extension work in cooperation with State extension divisions in Florida, Maine, Maryland, Massachusetts, Michigan, New York, and North Carolina. Instruction in staging and taking photographs and in organizing visual material for teaching purposes was given at State and district conferences.

In Michigan a new type of instruction was attempted. The field photographer of the office of cooperative extension work was sent into the field with the photographer of the State extension division to assist in staging photographs to illustrate extension results and activities. Two trips to Michigan were made by the department photographer, one early in the spring and one in the late summer. Between these visits the photographer of the State extension division continued taking the series begun on the first trip, and on the return of the department photographer the results of the work were studied and the series was completed.

In Maryland, intensive instruction was given to extension agents in Harford and Frederick Counties with a view to having them take a number of series of photographs. Six agents participated in this work. Two were county agricultural agents, two were home demonstration agents, one was an assistant agricultural agent, and one an assistant home demonstration agent. Series were completed on the following subjects: Economical feeding of dairy cows, Modern dairy equipment, Dairy calf-club work, More tomatoes on fewer acres, Grow healthy poults, Some flower gardens in Maryland, and Boys' and girls' 4-H club camp. Several of these series were immediately organized into local film strips for display and discussion at the annual conference of county extension agents.

Film-strip reproduction in lantern-slide subjects on films showed a marked increase in use by county extension agents. During 1930, 5,892 film strips were purchased by extension workers in comparison with 3,279 strips purchased the previous year. A considerable number of extension division leaders and county extension agents also took advantage of the department's contract with a commercial firm for the making of film-strip negatives and prints for local use.

Extension agents continued to use motion pictures despite the fact that the "talkies" have so rapidly superseded the silent pictures in

the commercial field. There were 1,429 shipments of department motion pictures to county extension agents in the year ended June 30, 1931.

As in previous years, county extension agents frequently used exhibits to illustrate extension activities and results. Wherever possible, either men and women or boys and girls served as demonstrators with such exhibits.

The office of exhibits cooperated with the office of cooperative extension work and with State extension divisions in presenting a number of exhibits at State fairs. A particularly attractive cooperative exhibit was made in connection with Camp Vail at the Eastern States Exposition in September. This exhibit, covering various phases of 4-H club work, was housed in a large tent and pavilion located next to the dormitory for club delegates at Camp Vail. The subjects of the various booths were: New York, handicraft; Maine, clothing; Vermont, maple sugar; Rhode Island, 4-H cookies; Virginia, fruit drinks; Pennsylvania, beekeeping; Connecticut, vegetable canning; West Virginia, jam production; Massachusetts, novelties; Delaware, poultry; Maryland, fruit canning; and New Hampshire, garden.

The office of cooperative extension work in 1930 cooperated with State extension divisions in taking 954 field and 266 laboratory photographs. Photographic prints, slides, enlargements, charts, posters, and drawings to the number of 5,804 were requested and prepared for use in extension work. Twelve lantern-slide series and 33 film-strip series were prepared for extension use, and 12 lantern-slide series and 7 film-strip series previously prepared were revised.

RADIO

The national 4-H club program became firmly established as a monthly feature of the farm and home radio hour during the year. This program, broadcast on the first Saturday of each month from 12.30 to 1.30 p. m., eastern standard time, was established in August, 1929. During 1930 22 club members from 21 States, 5 county extension agents, 3 members of the State extension staff, 14 members of the department extension staff, and 2 persons not employed as extion workers contributed talks to the programs. The club members' talks were timely and interesting discussions of outstanding 4-H club achievement and unique features of club work. They were supplemented by inspirational talks from national, State, and county extension workers. The programs were also strengthened considerably by a music-appreciation period, in which a series of related compositions was played by the United States Marine Band and explained by R. A. Turner of the Department of Agriculture. This monthly program was broadcast over the coast-to-coast network of 45 radio stations associated with the National Broadcasting Co.

In November, the 4-H club radio program took the form of a joint Federal-State celebration of the completion of a year's 4-H club activities. In this national recognition of 4-H club achievement, 36 States cooperated by organizing and broadcasting over their local stations 30-minute State achievement-day programs which were preceded and followed by 15-minute Federal programs broadcast over the entire network. Other outstanding features of the year were a broadcast by club members from London, England, broadcasts of

activities from the National 4-H Club Camp at Washington, D. C., and broadcasts by club members from the International Livestock Exposition in Chicago.

EXHIBITS

The office of exhibits conducted exhibitions in 1930 at 74 fairs and exhibitions throughout the United States. (Table 5.) These showings included State fairs and special shows, such as the National Dairy Exposition, St. Louis; American Royal Livestock Show, Kansas City; International Livestock Exposition, Chicago; Chemical Industries Exposition, New York; and numerous miscellaneous exhibitions.

TABLE 5.—*Exhibitions conducted during the fiscal year ended June 30, 1931*

Place	Fair	Dates
Atlanta, Ga	Southeastern Fair	Oct. 4–11, 1930.
Do	Georgia Poultry, Rabbit, and Pigeon Show	Nov. 26–29, 1930.
Atlantic City, N. J	American Fair	July 17–Aug. 27, 1930.
Baltimore, Md	Maryland Poultry Products Show	Jan. 6–9, 1931.
Bethany, Mo	Northwest Missouri State Fair	Sept. 2–6, 1930.
Billings, Mont	Midland Empire Fair	Sept. 1–5, 1930.
Birmingham, Ala	Alabama State Fair	Sept. 29–Oct. 4, 1930.
Boston, Mass	Sports and Boat Show	Feb. 7–14, 1931.
Centerville, Md	Annual Field Day, Maryland State Poultry Association.	June 18, 1931.
Charlottesville, Va	Virginia State Dairymen's Convention	Jan. 27–30, 1931.
Chicago, Ill	International Livestock Exposition	Nov. 29–Dec. 6, 1930.
Do	Coliseum Poultry Show	Dec. 3–7, 1930.
Danbury, Conn	Danbury Fair	Oct. 6–11, 1930.
Dallas, Tex	State Fair of Texas	Oct. 11–26, 1930.
De Land, Fla	Volusia County Fair	Feb. 17–21, 1931.
Detroit, Mich	Michigan State Fair	Aug. 31–Sept. 6, 1930.
East Lansing, Mich	Michigan State College Road Show	Oct. 28–30, 1930.
Enid, Okla	Enid Road Show	Mar. 4–6, 1931.
Escanaba, Mich	Upper Peninsula State Fair	Aug. 18–25, 1930.
Fayetteville, Ark	Annual Field Day	Mar. 19, 1931.
Florence, S. C	Pee Dee Fair	Sept. 29–Oct. 3, 1930.
Hagerstown, Md	Hagerstown Fair	Sept. 16–20, 1930.
Hamline, Minn	Minnesota State Fair	Aug. 30–Sept. 6, 1930.
Harrington, Del	Kent-Sussex Fair	July 29–Aug. 2, 1930.
Helena, Mont	Montana State Fair	Aug. 18–23, 1930.
Hutchinson, Kans	Kansas State Fair	Sept. 13–19, 1930.
Indianapolis, Ind	Indiana State Fair	Aug. 30–Sept. 6, 1930.
Johnson City, Tenn	Appalachian District Fair	Sept. 8–13, 1930.
Kankakee, Ill	Kankakee Interstate Fair	Aug. 11–16, 1930.
Kansas City, Mo	American Royal Livestock Show	Nov. 15–22, 1930.
Knoxville, Tenn	East Tennessee Division Fair	Sept. 20–27, 1930.
La Fayette, Ind	Annual Road Show and School	Jan. 19–23, 1931.
Leipzig, Germany	International Fur Trade Congress	May 31–Sept. 30, 1930.
Lewiston, Me	Maine State Fair	Sept. 1–4, 1930.
Lexington, Va	Sixth Annual Highway Conference	Feb. 5–6, 1931.
Lincoln, Nebr	Nebraska State Fair	Aug. 29–Sept. 5, 1930.
Little Rock, Ark	Arkansas State Fair	Oct. 6–11, 1930.
London, England	Fourth World's Poultry Congress	July 22–30, 1930.
Los Angeles, Calif	Fifth Annual Christmas Livestock Show	Nov. 29–Dec. 6, 1930.
Memphis, Tenn	Mid-South Fair and Dairy Show	Sept. 20–27, 1930.
Milwaukee, Wis	Wisconsin State Fair	Aug. 25–30, 1930.
Missoula, Mont	Western Montana Fair	Sept. 16–19, 1930.
Moultrie, Ga	Annual Hog School	Jan. 14–15, 1931.
Muskogee, Okla	Oklahoma Free State Fair	Sept. 27–Oct. 4, 1930.
New York, N. Y	Thirteenth Exposition of Chemical Industries	May 4–10, 1931.
Do	Madison Square Garden Poultry Show	Jan. 14–18, 1931.
Omaha, Nebr	Ak-Sar-Ben Stock Show	Oct. 31–Nov. 7, 1930.
Orlando, Fla	Central Florida Exposition	Feb. 24–28, 1931.
Phoenix, Ariz	Arizona State Fair	Nov. 10–15, 1930.
Prescott, Ariz	Northern Arizona State Fair	July 2–5, 1930.
Puyallup, Wash	Western Washington Fair	Sept. 15–21, 1930.
Raleigh, N. C	North Carolina State Fair	Oct. 13–18, 1930.
Richmond, Va	Virginia State Fair	Sept. 8–13, 1930.
Rochester, N. H	Rochester Fair	Sept. 23–26, 1930.
Rochester, N. Y	Rochester Exposition	Sept. 1–6, 1930.
St. Louis, Mo	Washington University Engineers' Day	Mar. 20–21, 1931.
Do	National Dairy Exposition	Oct. 11–19, 1930.

TABLE 5.—*Exhibitions conducted during the fiscal year ended June 30, 1931*—Continued

Place	Fair	Dates
Savannah, Ga	Georgia State Fair	Oct. 27–Nov. 1, 1930.
Shreveport, La	State Fair of Louisiana	Oct. 25–Nov. 2, 1930.
Spokane, Wash	Spokane Interstate Fair	Sept. 1–6, 1930.
Springfield, Ill	Illinois State Fair	Aug. 16–23, 1930.
Springfield, Mass	Eastern States Exposition	Sept. 14–20, 1930.
Tampa, Fla	South Florida Fair	Feb. 3–14, 1931.
Topeka, Kans	Kansas Free Fair	Sept. 8–12, 1930.
Trenton, N. J	Trenton Interstate Fair	Sept. 1–6, 1930.
Waco, Tex	Texas Cotton Palace and Dairy Show	Oct. 10–19, 1930.
Washington, D. C	Sixth Annual Industrial Exposition	Nov. 3–8, 1930.
Do	United States Pharmacopœial Convention	May 12–17, 1931.
Do	Howard University Health Week	Apr. 27–May 2, 1931.
Waterloo, Iowa	Dairy Cattle Congress	Sept. 29–Oct. 5, 1930.
Wichita, Kans	Southwest Road Show and School	Feb. 24–27, 1931.
Do	Western Tractor and Farm Power Equipment Show	Do.
Wilson, N. C	Wilson County Fair	Oct. 18–25, 1930.
Yakima, Wash	Washington State Fair	Sept. 8–13, 1930.

Eighteen exhibition groups were sent out on State and interstate fair circuits during the year, the material for the exhibits having been selected with special reference to the agricultural interests of the areas in which they were shown. The exhibits represented the department interests in dairying, livestock, forestry, roads, predatory animals and rodents, poultry, marketing, home economics, weather, farm management, and boys' and girls' club work. In addition, special groups were prepared for the National Dairy Exposition in St. Louis, the Eastern States Exposition, Springfield, Mass., and the International Livestock Exposition in Chicago. The special poultry exhibit displayed at the Fourth World's Poultry Congress, London, England, in July, was also displayed at the St. Louis National Poultry Show, the National Dairy Exposition in St. Louis, and the Chicago Coliseum Poultry Show. The material for the 74 fairs and exhibitions required 31 carload and 36 less-than-carload shipments in the outgoing movement, and 29 carload and 27 less-than-carload shipments were received. The total of 60 carload and 63 less-than-carload shipments were handled in or out of the exhibits factory-warehouse at Alexandria, Va.

Forty-six exhibitions were made at State, interstate, and international fairs, as compared with 45 in 1920, 40 in 1928, 37 in 1927, and 35 in 1926. No less than a carload of material was shown at each of these exhibitions. Data on personnel cost at fairs are found in Table 6.

TABLE 6.—*Exhibition personnel costs at State, interstate, and international fairs, 1926–1930*

Item	1926	1927	1928	1929	1930
Exhibitions ... number	35	37	40	45	46
Man-days ... do	1,172	943	877	1,131	1,094
Total department salary cost ... dollars	8,636.54	6,450.32	6,319.39	8,343.00	7,726.69
Total department travel and subsistence cost ... do	12,472.81	7,875.78	6,685.45	9,117.75	7,965.19
Cost per exhibition ... do	603.12	387.10	325.12	388.02	341.13

The exhibition appropriation of $120,000 available during the fiscal year 1930 was the same as that for 1929. No change was made in the cooperative arrangements with the bureaus of the department concerning the payment of travel and subsistence expenses of exhibition personnel, the office of exhibits and the bureaus each having agreed to pay half of the expenses.

COOPERATION WITH FAIRS

The cooperative exhibition plan which has been in effect for several years was continued. Under this plan the department provides the exhibits and personnel for their installation and demonstration. The fairs furnish the transportation by deposit in advance, exhibition space, storage for shipping containers, drayage and labor for unloading and reloading cars; common labor for unpacking, installing, dismantling, and repacking exhibits; janitor, watchman, electrical, and such other services as are necessary to make a creditable display.

As a result of the continued efforts by the office of exhibits to reduce transportation costs to the fairs and at the same time to shorten the periods of inactivity of the displays between exhibitions, it has been possible to further reduce by $5 the amount of deposit required from fairs to cover transportation costs. The deposit for the 1931 showing season has been placed at $160 per carload per fair, which represents a saving of $25 per fair since 1926, when the transportation cost was $185. The cooperation given by fairs may be summarized as follows:

Deposits to cover transportation charges	$9,335.92
Value of exhibition space (estimated)	41,000.00
Trucking (unloading and loading exhibits)	1,288.26
Installation and dismantling labor	1,137.25
Miscellaneous exhibit expenses	644.35
Total	53,405.78

The standing committee on Government exhibits, of the International Association of Fairs and Expositions, met in Washington, March 23 and 24, 1931, and commended the office of exhibits for its continued progress in preparing valuable information in the form of exhibits and placing it at the disposal of agricultural fairs. They again recommended the employment of a capable extension specialist to assist the agricultural colleges, State departments of agriculture, and State associations of fairs, in preparing desirable exhibits within the several States, and recommended that the scattered exhibit functions of the department be coordinated into one effective central exhibit agency. The committee, likewise, renewed its recommendation to the Secretary of Agriculture for an appropriation of $225,000 to carry out the enlarged exhibit program as recommended by committees of the international association for the last three years.

PARTICIPATION IN FOREIGN EXHIBITIONS

The department participated, under special Congressional appropriations, in two major international expositions in Europe.

At the International Fur Trade Exhibition and Congress held in Leipzig, Germany, May 30 to September 30, 1930, there was displayed

an exhibit portraying the development of the fur industry of the United States, the production, conservation, and utilization of fur as a natural resource. The importance of forests as the natural habitat of fur-bearing animals was also demonstrated.

The second foreign exhibit was displayed in the Crystal Palace at the Fourth World's Poultry Congress held in London, England, July 22 to 30, 1930. It set forth the fundamental factors in the poultry industry in the United States and occupied 2,880 square feet of space. It portrayed breeding for egg production, history of incubation and brooding, nutrition of poultry (talking hen), the poultry industry of the United States, marketing eggs, and marketing poultry. This entire exhibit, particularly the talking hen, proved very popular with visitors to the congress, and since its return to the United States has been shown as a whole or in part on nine occasions.

PREPARATION OF EXHIBITS

During the year the equivalents of 40 exhibit units were prepared, those of 34 were discarded, those of 33 were extensively revised or rebuilt, and those of 166 were renovated. Fewer new exhibits were built, but more attention was given to the improvement of existing units.

Fairs and expositions using department exhibits, through their national organization, now insist that the exhibits offered them meet certain qualifications before the fair organizations make the necessary investment of money and space required. These qualifications are: (1) Usefulness of information to people of the region served by the fair; (2) timeliness of information; (3) interest power, i. e., ability of exhibit to get its message into the minds of the audiences; and (4) attractiveness of appearance.

In view of this fact all existing exhibits were closely scrutinized. Those which had proved successful were retained, 33 which showed possibilities were revised, and 34 weaker units were discarded and their usable parts salvaged for use in future exhibits. In examining the effectiveness of a number of the exhibits the services of a prominent psychologist were utilized, and a number of his suggestions were employed in improving these units. In the revision of existing exhibits an effort has been made to attain terseness of expression, and in one group of eight exhibits, 1,608 words were eliminated.

It is becoming increasingly evident that the mere introduction of motion or action will not suffice in obtaining interest power and effectiveness of presentation. There must be actual mechanization of ideas, that is, the action must aid in clarifying the thought.

Motion used only as an eye catcher does not hold the attention long and does not move ideas from exhibit to audience. Also it is soon recognized as a trick and such recognition lowers the standing of the exhibiting organization in the mind of the thoughtful observer.

A new development in the appearance of the exhibits was the assignment of a distinctive color to each of the 18 exhibit groups. The woodwork, trim, and hangings of the entire group were thus made to harmonize. As these different groups are shown at a certain fair they will present a different appearance from year to year aside from differences in subject-matter content.

Improvement in mechanical design has been gained through study by the engineering section of new methods and equipment developed by commercial concerns and presented at technical institutes, such as the Westinghouse Electric Institute. As a further method of improving exhibit construction the advice of a local consulting mechanical engineer was obtained.

An unusual feature of the department's exhibit at the National Dairy Exposition, St. Louis, was a breeding school and demonstration herd brought from the dairy experimental farm at Huntley, Mont., which brought requests for similar schools from a majority of the States.

Near the end of the year the new quarters of the office of exhibits became available and the remaining renovation work was completed there.

An outstanding development of the year's activities was the marked increase in requests for assistance in planning and preparing exhibits, and for building duplicates of some of the department's newer exhibits on a cost basis, such service being sought by commercial, educational, and State institutions. A total of 37 requests for planning help, 34 requests for publications, and 28 requests for plans, specifications, and photographs of the mechanical hen have been met so far as time and resources permitted. There is, however, no way to meet the demand for exhibit-building service, and thus extend the usefulness of this office by providing exhibits for use at the numerous smaller fairs and conventions which can not be reached by the department's exhibition program.

NEW PROJECTS

A comprehensive department exhibit on wool production, marketing, and utilization was planned, and four units were under construction at the close of the year. Subject matter for a department exhibit on all phases of cotton production, marketing, and utilization was received, and the development of plans was begun.

FUNDS AND PERSONNEL

Under the direction of the office of exhibits an appropriation of approximately $120,000 was spent for exhibits at State, interstate, and international fairs. The addition of $9,168.92 in deposits makes a total of $129,168.92 for exhibit activities.

In addition, nine units of the department contributed to this office the sum of $1.178.44 for work performed in connection with occasions not eligible to participate in the appropriation for fair exhibits. This work consisted of renovating, repairing, trucking, shipping, and replacing in storage exhibit material displayed at occasions not within the provisions of the exhibit appropriation act.

No important changes in personnel occurred during the year. The personnel in Washington at the end of the year numbered 30, and in Alexandria, Va., 11. Emergency employment for varying periods during the year totaled 13.

CHANGE IN WAREHOUSING FACILITIES

In February, 1931, negotiations with the Navy Department were completed and space for the exhibit factory and warehouse facilities

of the office of exhibits at Alexandria, Va., was assigned in the Naval Torpedo Station. On June 30 the department exhibit activities at Alexandria were transferred from the Portner Building to the fourth floor of the Naval Torpedo Station. The new space is well adapted for the department's purposes. It consists of approximately 48,000 square feet of floor surface, about 7,000 square feet more than was afforded by the former quarters. The change will increase the efficiency of the exhibit activities through savings in trucking and handling costs. Cars can now be loaded and unloaded at the Naval Torpedo Station building, whereas at the old location it was necessary to truck material a considerable distance. The new quarters also provide improved working conditions and may result in some saving in direct money outlay.

MOTION PICTURES

During the year 31 new films were completed and released, including 3 talking pictures, the first sound films that the Department of Agriculture has released. (Table 7.) A total of 185 copies of these 31 pictures have been provided for loan to extension workers and to the general public.

TABLE 7.—*New motion pictures completed during fiscal year 1931*

Title of picture	Reels made	Copies made
	Number	*Number*
Sound pictures:		
Sago Making in Primitive New Guinea (1 reel)	1	1
The Babcock Test (1 reel)	1	1
Forest or Wasteland? (2 reels)	2	1
Silent pictures:		
Highways of Uruguay (1 reel)	3	3
Highways of Chile (2 reels)	6	3
Highway Glimpses of Panama (2 reels)	6	3
Highway Glimpses of Trinidad (1 reel)	3	3
Highways of Venezuela (2 reels)	6	3
Highway Glimpses of Colombia and Dutch West Indies (1 reel)	3	3
Food Makes a Difference (2 reels)	12	6
Why Moths Leave Home (1 reel)	15	15
Quality Milk (1 reel)	9	9
Mixed-in-Place Bituminous Surfaces (2 reels)	8	4
Penetration Bituminous Macadam (1 reel)	4	4
Forest Fires—or Game? (1 reel)	21	21
Unburned Woodlands (1 reel)	13	13
Cooperative Marketing—Dried Prunes (2 reels)	14	7
Back of the Weather Forecast (2 reels)	14	7
What Price Fire? (2 reels)	2	1
Hot-Mixed Bituminous Pavements (1 reel)	4	4
How to Grow Hogs (2 reels)	18	9
Fighting the European Corn Borer with Machinery (1 reel)	3	3
Good Posture Wins (2 reels)	14	7
Forests and Streams (1 reel)	11	11
Timber-r-r (1 reel)	1	1
Testing Seeds in Soil (1 reel)	2	2
Forest or Wasteland? (3 reels)	36	12
How Seeds Germinate (1 reel)	1	1
The Cougar Hunt (1 reel)	11	11
Highways of Peru (2 reels)	6	3
How Forests Serve (1 reel)	13	13
Total	263	185

The total number of shipments of standard-width film made during the year was 2,880, a falling off of nearly 15 per cent, as compared with the shipments during the preceding fiscal year. This decline is attributable largely to the fact that the demand for silent

pictures has tended to abate since the advent of talking pictures. In spite of this relative falling off in demand, 615 applications for loans could not be filled, because of lack of copies of the films desired. Experimental circulation of some 30 subjects on 16-millimeter stock developed a relatively small demand from extension workers. This service will be continued, however, and will be extended in accordance with demand and with funds available.

Radical changes in the organization of the staff of the office of motion pictures were made during the year, with a view to handling more efficiently the steadily increasing volume of business. Under the reorganization plan, four divisions have been created: A division of operation, to handle personnel and business matters; a division of production, to handle motion-picture projects from the standpoint of scenario, direction, and editing; a laboratory division, to handle processing operations; and a circulation division responsible for the booking and shipment of films on loan.

Sound-on-film equipment for both projection and recording was installed during the year, and the projection room of the motion-picture building on C Street was sound-proofed to serve as a temporary sound studio. There the recording of voice for lecture pictures is going forward.

Statistics on pictures purchased by outside agencies are presented in Table 8.

TABLE 8.—*Summary of department motion pictures purchased by outside agencies*

Bureau sponsoring subject matter of film	Number of reels		Number of prints	
	Domestic purchases	Foreign purchases	Domestic purchases	Foreign purchases
Agricultural Economics	20	1	9	1
Animal Industry	25	16	19	12
Biological Survey	17	0	13	0
Dairy Industry	9¾	2	14	3
Entomology	15	4	14	3
Extension Service	14	8	8	6
Forest Service	65	17	48	14
Home Economics	8	2	4	1
Plant Industry	29	12	25	10
Public Roads	37	21	29	16
Weather Bureau	9	----------	5	----------
Total	248¾	83	188	66
	331¾		254	

APPENDIX

[Funds for extension work are appropriated for fiscal years ending June 30, whereas extension agents are required to prepare their reports for calendar years. For this reason the statements of funds expended are for the fiscal year ended June 30, 1930, and the statistics of results of work done are for the calendar year ended November 30, 1930]

TABLE 9.—*Results of cooperative extension work, 1930*

Project or line of work	Reported by county agricultural agents		Reported by home demonstration agents		Reported by club agents [1]		Total of all lines of work	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
County associations fostering extension work	2,024	2,249	1,018	1,171	99	125	3,141	3,545
Membership in these associations	1,899	512,457	958	174,199	91	18,132	2,948	704,788
Communities in counties	2,435	48,196	1,325	39,992	181	8,580	3,941	96,768
Communities with extension program	2,196	32,260	1,287	27,388	165	5,740	3,648	65,388
Voluntary local leaders:								
Men leaders in adult work	2,217	127,413	122	2,327	7	152	2,346	129,892
Women leaders in adult work	1,198	33,041	1,135	69,931	10	179	2,343	103,151
Men leaders in junior work	1,841	17,359	160	1,001	186	2,939	2,187	21,299
Women leaders in junior work	1,362	15,277	1,002	17,385	173	6,145	2,537	38,807
Older club boy leaders in junior work	1,162	8,763	107	674	151	977	1,420	10,414
Older club girl leaders in junior work	752	4,529	745	9,235	142	1,060	1,639	14,824
Clubs or other groups organized to carry on adult home demonstration work	684	11,687	1,307	23,171	5	101	1,996	34,959
Membership in such clubs or groups	671	200,980	1,285	444,506	4	854	1,960	646,340
Junior clubs	2,088	27,208	1,200	18,189	212	10,783	3,500	56,180
Enrollment—								
Boys	2,257	263,128	220	8,487	206	61,582	2,683	333,197
Girls	1,618	142,727	1,211	274,438	205	72,352	3,034	489,517
Completions—								
Boys	2,154	172,324	205	5,608	202	44,540	2,561	222,472
Girls	1,532	103,876	1,168	170,783	200	57,214	2,900	331,873
Club members in school		[2] 93		[2] 95		[2] 95		[2] 94
Club members not in school		[2] 7		[2] 5		[2] 5		[2] 6
Junior judging teams trained	1,468	6,110	557	4,687	180	1,736	2,205	12,533
Junior demonstration teams trained	1,253	10,262	824	11,202	147	2,060	2,224	23,524
Groups organized for extension work with rural young people above club age	176	538	99	328	25	46	300	912
Membership in such groups	164	7,640	92	5,097	18	703	274	13,440
Farm visits made	2,550	1,657,554	178	20,013	182	81,176	2,910	1,758,743
Different farms visited	2,549	855,500	176	12,054	182	42,461	2,907	910,015
Home visits made	923	109,653	1,358	407,311	133	29,244	2,414	546,208
Different homes visited	923	73,593	1,356	239,257	133	17,234	2,412	330,084
Office calls	2,534	3,669,422	1,352	588,961	184	59,182	4,070	4,317,565
Telephone calls	2,452	2,344,969	1,315	591,339	185	79,399	3,952	3,015,707
Time in field		[2] 66		[2] 68		[2] 66		[2] 67

See footnotes at end of table.

TABLE 9.—*Results of cooperative extension work, 1930*—Continued

Project or line of work	Reported by county agricultural agents		Reported by home demonstration agents		Reported by club agents [1]		Total of all lines of work	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Time in office		[2] 34		[2] 32		[2] 34		[2] 33
News articles prepared for press	2,505	320,786	1,321	109,173	189	19,895	4,015	449,854
Individual letters written	2,532	3,202,978	1,358	1,142,209	191	156,801	4,081	4,501,988
Different circular letters prepared	2,413	141,836	1,275	60,192	168	12,533	3,856	214,561
Bulletins distributed	2,465	3,702,186	1,301	2,601,104	166	354,271	3,932	6,657,561
Radio talks made	496	3,195	220	709	56	244	772	4,148
Events at which extension exhibits were shown	1,956	7,863	1,199	10,658	170	1,955	3,325	20,476
Adult leader-training meetings held	1,395	16,692	949	12,638	13	109	2,357	29,439
Leaders attending	1,122	198,653	939	137,251	10	3,107	2,071	339,011
Junior leader-training meetings held	1,364	7,375	723	4,543	172	1,546	2,259	13,464
Leaders attending	1,359	86,163	714	55,131	172	21,994	2,245	163,288
Method demonstration meetings held	2,239	148,606	1,302	234,415	169	19,437	3,710	402,458
Attendance	2,214	3,033,605	1,287	3,956,873	168	228,645	3,669	7,219,123
Result demonstration meetings held	1,889	37,780	803	24,357	92	4,231	2,784	66,368
Attendance	1,876	895,795	797	523,233	91	97,409	2,764	1,516,437
Tours conducted	1,705	5,854	620	2,090	148	828	2,473	8,772
Attendance	1,701	299,715	618	118,041	148	24,177	2,467	441,933
Achievement days held for adults	573	1,293	680	1,696	11	26	1,264	3,015
Attendance	565	283,393	674	225,671	11	3,352	1,250	512,416
Achievement days held for juniors	1,341	6,525	806	3,102	175	2,078	2,322	11,705
Attendance	1,331	638,748	801	308,120	175	179,517	2,307	1,126,385
Women's club encampments held	132	206	492	651	6	7	630	864
Attendance	121	16,069	485	47,414	5	589	611	64,072
Junior club encampments held	1,269	1,707	733	982	123	209	2,125	2,898
Attendance	1,259	130,287	729	77,889	124	18,663	2,112	226,839
Meetings held by agents	2,239	370,208	1,302	334,260	175	45,911	3,716	750,379
Attendance	2,214	15,161,523	1,287	9,075,153	175	1,368,809	3,676	25,605,485
Adult meetings held by local leaders not participated in by agent	952	48,144	707	45,144	6	257	1,665	93,545
Attendance	945	855,853	701	577,537	7	11,842	1,653	1,445,232
Junior meetings held by local leaders not participated in by agent	1,050	62,123	585	39,737	114	38,203	1,749	140,063
Attendance	1,045	1,043,957	583	531,278	115	546,636	1,743	2,121,871
Corn:								
Adult result demonstrations	1,654	28,405			6	34	1,660	28,439
Junior projects completed [3]	1,367	29,451	4	62	89	1,938	1,460	31,451
Wheat:								
Adult result demonstrations	910	10,777			1	5	911	10,782
Junior projects completed [3]	88	502			4	7	92	509
Oats:								
Adult result demonstrations	962	10,327			2	32	964	10,359
Junior projects completed [3]	82	518					82	518

Rye:								
Adult result demonstrations	356	7,611					356	7,611
Junior projects completed [3]	4	33					4	33
Barley:								
Adult result demonstrations	530	3,719			2	24	532	3,743
Junior projects completed [3]	46	134			2	10	48	144
Other cereals:								
Adult result demonstrations	336	4,434					336	4,434
Junior projects completed [3]	178	2,451			6	274	184	2,725
Alfalfa:								
Adult result demonstrations	1,288	15,068			4	21	1,292	15,089
Junior projects completed [3]	57	468			13	117	70	585
Sweetclover:								
Adult result demonstrations	840	6,714			2	9	842	6,723
Junior projects completed [3]	15	34					15	34
Clovers (red, alsike, and white):								
Adult result demonstrations	491	5,695			2	36	493	5,731
Junior projects completed [3]	5	14			1	1	6	15
Vetch:								
Adult result demonstrations	575	12,352			1	4	576	12,356
Junior projects completed [3]	43	516					43	516
Lespedeza:								
Adult result demonstrations	607	7,305			2	28	609	7,333
Junior projects completed [3]	20	61					20	61
Pastures:								
Adult result demonstrations	1,178	14,178			1	8	1,179	14,186
Junior projects completed [3]	36	233			1	4	37	237
Soybeans:								
Adult result demonstrations	994	16,854			1	12	995	16,866
Junior projects completed [3]	180	1,208			3	17	183	1,225
Cowpeas:								
Adult result demonstrations	480	8,108					480	8,108
Junior projects completed [3]	111	1,038					111	1,038
Velvetbeans:								
Adult result demonstrations	240	3,514					240	3,514
Junior projects completed [3]	8	41					8	41
Field beans:								
Adult result demonstrations	171	1,002					171	1,002
Junior projects completed [3]	51	364	3	31	20	256	74	651
Peanuts:								
Adult result demonstrations	265	2,980					265	2,980
Junior projects completed [3]	340	3,086			7	117	347	3,203
Other legumes and forage crops:								
Adult result demonstrations	366	5,079					366	5,079
Junior projects completed [3]	43	280			2	16	45	296
Potatoes:								
Adult result demonstrations	965	11,079			4	11	969	11,090
Junior projects completed [3]	706	9,159	4	28	128	3,585	838	12,772
Sweetpotatoes:								
Adult result demonstrations	513	6,081			1	12	514	6,093
Junior projects completed [3]	372	3,032	1	2	14	264	387	3,298

See footnotes at end of table.

TABLE 9.—*Results of cooperative extension work, 1930*—Continued

Project or line of work	Reported by county agricultural agents		Reported by home demonstration agents		Reported by club agents [1]		Total of all lines of work	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Cotton:								
Adult result demonstrations	787	32,692			2	10	789	32,702
Junior projects completed [3]	704	22,631			8	719	712	23,350
Tobacco:								
Adult result demonstrations	289	4,625			1	2	290	4,627
Junior projects completed [3]	183	4,298			7	230	190	4,528
Other special crops:								
Adult result demonstrations	209	2,575					209	2,575
Junior projects completed [3]	92	975			9	87	101	1,062
Home gardens:								
Adult result demonstrations	484	15,455	632	49,150	3	98	1,119	64,703
Junior projects completed [3]	538	12,595	591	48,616	149	12,457	1,278	73,668
Market gardens:								
Adult result demonstrations	590	9,234	159	5,872	2	12	751	15,118
Junior projects completed [3]	208	2,424	99	5,920	26	789	333	9,133
Beautifying home grounds:								
Adult result demonstrations	595	7,721	608	34,022	5	25	1,208	41,768
Junior projects completed [3]	139	3,903	374	29,760	30	859	543	34,522
Tree fruits:								
Adult result demonstrations	1,135	20,383	116	3,901	2	8	1,253	24,292
Junior projects completed [3]	96	519	60	1,835	13	153	169	2,507
Bush and small fruits:								
Adult result demonstrations	333	1,995	104	3,539	1	7	438	5,541
Junior projects completed [3]	57	602	61	2,102	36	263	154	2,967
Grapes:								
Adult result demonstrations	410	1,943	67	1,045	1	5	478	2,993
Junior projects completed [3]	16	109	42	817	2	28	60	954
Forestry:								
Adult result demonstrations	660	5,709	3	29	3	10	666	5,748
Junior projects completed [3]	138	2,413	3	71	87	2,895	228	5,379
Forest or wood-lot plantings made	373	4,469	1	1	55	999	429	5,469
Farms on which assistance was given in forest or wood-lot management	534	6,010			21	160	555	6,170
Farms on which windbreaks were planted	291	3,825			7	47	298	3,872
Farms on which attempts were made to control white-pine blister rust	37	918			4	50	41	968
Farms on which other assistance was given relative to forestry	219	9,071			7	48	226	9,119
Rodents:								
Adult result demonstrations	412	9,450	10	179			422	9,629
Poison bait used	578	[4] 1,154,679	10	[4] 899	1	[4] 5	589	[4] 1,155,583

Other animal pests:								
Adult result demonstrations	150	1,545	7	156	----------	----------	157	1,701
Poison bait used	141	[4] 129,929	3	[4] 24	----------	----------	144	[4] 129,953
Insects:								
Adult result demonstrations	490	19,783	36	1,777	1	1	527	21,561
Poison bait used	560	[4] 4,406,927	35	[4] 2,686	----------	----------	595	[4] 4,409,613
Rural engineering:								
Adult result demonstrations	1,129	25,904	132	2,753	2	8	1,263	28,665
Junior projects completed [3]	197	3,655	32	2,512	20	534	249	6,701
Farms on which drainage systems were installed	923	6,369	10	42	----------	----------	933	6,411
Farms on which irrigation systems were installed	349	2,727	1	5	----------	----------	350	2,732
Farms on which terraces and soil-saving dams were built	1,085	46,247	2	15	2	12	1,089	46,274
Farms on which land was cleared of stumps or bowlders	587	12,570	9	79	----------	----------	596	12,646
Families assisted with house-planning problems	486	3,428	294	5,754	----------	----------	780	9,182
Dwellings constructed according to plans furnished	340	1,155	174	669	----------	----------	514	1,824
Dwellings remodeled according to plans furnished	277	1,333	260	1,550	----------	----------	537	2,883
Sewage-disposal systems installed according to plans furnished	700	2,908	188	999	2	4	890	3,911
Water systems installed according to plans furnished	632	2,445	272	1,764	1	2	905	4,211
Heating systems installed according to plans furnished	96	235	106	404	----------	----------	202	639
Lighting systems installed according to plans furnished	296	3,001	192	1,930	----------	----------	488	4,931
Farms on which buildings other than dwellings were constructed or remodeled according to plans furnished	2,022	40,472	260	3,548	10	104	2,292	44,124
Poultry:								
Adult result demonstrations	1,589	51,665	485	21,616	4	36	2,078	73,317
Junior projects completed [3]	1,338	34,611	502	18,637	185	8,271	2,025	61,519
Farms on which assistance was given in obtaining purebred cockerels	1,213	18,671	123	2,894	21	162	1,357	21,727
Farms on which assistance was given in obtaining high-grade or purebred females	888	17,301	124	4,780	37	639	1,049	22,720
Cockerel circles or clubs organized	26	37	21	24	2	3	49	64
Membership in such circles or clubs	24	428	21	1,154	1	16	46	1,598
Flock-improvement associations organized or reorganized	282	445	65	111	2	2	349	558
Membership in such associations	266	8,884	61	2,760	2	78	329	11,722
Farms whose operators were not in associations keeping performance records of birds	683	11,551	51	2,381	7	225	741	14,157
Dairy cattle:								
Adult result demonstrations	1,241	25,944	72	2,555	5	55	1,318	28,554
Junior projects completed [3]	1,472	28,248	71	383	188	7,923	1,731	36,554
Farms on which assistance was given in obtaining purebred sires	1,752	13,316	14	104	46	171	1,812	13,591
Farms on which assistance was given in obtaining high-grade or purebred females	1,462	16,000	13	160	68	662	1,543	16,822
Bull circles or clubs organized	240	599	5	5	2	2	247	606
Membership in such circles or clubs	225	6,532	5	45	2	31	232	6,608
Herd-improvement associations organized or reorganized	916	1,426	2	2	5	6	923	1,434
Membership in such associations	907	31,537	2	19	5	100	914	31,656
Farms whose operators were not in associations keeping performance records of animals	807	16,212	11	283	11	113	829	16,608
Beef cattle:								
Adult result demonstrations	636	4,092	----------	----------	----------	----------	636	4,092
Junior projects completed [3]	820	11,461	16	25	84	1,293	920	12,779
Farms on which assistance was given in obtaining purebred sires	1,025	5,838	----------	----------	5	7	1,030	5,845

See footnotes at end of table.

TABLE 9.—*Results of cooperative extension work, 1930*—Continued

Project or line of work	Reported by county agricultural agents		Reported by home demonstration agents		Reported by club agents [1]		Total of all lines of work	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Beef cattle—Continued.								
Farms on which assistance was given in obtaining high-grade or purebred females	505	3,167			7	24	512	3,191
Bull circles or clubs organized	33	102	1	1	1	2	35	105
Membership in such circles or clubs	20	233	1	16			21	249
Herd-improvement associations organized or reorganized	42	71					42	71
Membership in such associations	38	2,130					38	2,130
Farms whose operators were not in associations keeping performance records of animals	107	637					107	637
Sheep:								
Adult result demonstrations	595	8,293	1	1	2	9	598	8,303
Junior projects completed [3]	725	6,592	1	6	123	1,794	849	8,392
Farms on which assistance was given in obtaining purebred sires	980	7,098			16	58	996	7,156
Farms on which assistance was given in obtaining high-grade or purebred females	626	3,273			23	125	649	3,398
Ram circles or clubs organized	25	96			2	4	27	100
Membership in such circles or clubs	17	307					17	307
Flock-improvement associations organized or reorganized	48	54					48	54
Membership in such associations	47	2,771					47	2,771
Farms whose operators were not in associations keeping performance records of animals	102	1,958					102	1,958
Swine:								
Adult result demonstrations	997	12,374	2	19	12	16	1,011	12,409
Junior projects completed [3]	1,573	31,942	10	254	153	3,883	1,736	36,079
Farms on which assistance was given in obtaining purebred sires	1,380	11,707	3	21	19	72	1,402	11,800
Farms on which assistance was given in obtaining high-grade or purebred females	1,056	14,134	1	6	37	295	1,094	14,435
Boar circles or clubs organized	43	137	1	1	2	5	46	143
Membership in such circles or clubs	28	757	1	8	1	12	30	777
Herd-improvement associations organized or reorganized	28	36					28	36
Membership in such associations	24	924					24	924
Farms whose operators were not in associations keeping performance records of animals	171	1,582	1	23	1	6	173	1,611
Horses and mules:								
Adult result demonstrations	85	604			1	18	86	622
Junior projects completed [3]	78	444			9	96	87	540
Farms on which assistance was given in obtaining purebred sires	94	277	1	2			95	279
Farms on which assistance was given in obtaining high-grade or purebred females	49	215			1	1	50	216
Stallion circles or clubs organized	28	35					28	35

Membership in such circles or clubs	28	838	----------	----------	----------	----------	28	838
Herd-improvement associations organized or reorganized	11	12	----------	----------	----------	----------	11	12
Membership in such associations	11	266	----------	----------	----------	----------	11	266
Farms whose operators were not in associations keeping performance records of animals	7	64	----------	----------	----------	----------	7	64
Farm management, credit, insurance, and taxation:								
Adult result demonstrations	656	13,376	10	610	2	33	668	14,019
Junior projects completed [3]	104	5,486	8	338	11	624	123	6,448
Farms on which farm accounts were kept	1,108	22,387	5	28	7	101	1,120	22,516
Farms on which cost-of-production records were kept	880	19,552	3	14	2	7	885	19,573
Farms on which assistance was given in summarizing and interpreting accounts	1,017	19,467	3	16	3	29	1,023	19,512
Farms on which assistance was given in making inventory or credit statements	775	20,205	3	34	6	53	784	20,292
Farm-business or enterprise-survey records taken	426	20,468	2	3	----------	----------	428	20,471
Farms on which changes in business were made as result of keeping accounts or survey records	803	16,779	1	2	2	2	806	16,783
Other farms on which cropping, livestock, or complete farming systems were adopted	848	40,855	----------	----------	----------	----------	848	40,855
Farms on which advice relative to leases was given	1,094	10,665	----------	----------	1	2	1,095	10,667
Farms on which assistance in obtaining credit was given	1,057	33,108	1	2	1	2	1,059	33,112
Different farms on which assistance was given in the use of outlook or other timely economic information as a basis for readjusting farm operations	1,300	134,644	38	1,271	3	28	1,341	135,943
Marketing:								
Cooperative marketing associations organized during the year	187	1,557	22	126	1	2	210	1,685
Cooperative marketing associations previously organized	601	7,172	88	364	1	3	690	7,539
Membership in such associations	469	818,254	86	38,894	----------	----------	555	857,148
Value of products marketed	489	[5] 295,986,825	91	[5] 1,707,515	----------	----------	580	[5] 297,694,340
Value of supplies purchased	320	[5] 42,924,560	18	[5] 45,012	----------	----------	338	[5] 42,969,572
Associations assisted with problems of—								
Preliminary analysis	158	1,616	9	30	1	2	168	1,648
Organization	252	2,230	20	155	----------	----------	272	2,385
Accounting and auditing	133	1,041	14	60	----------	----------	147	1,101
Financing	125	1,273	11	56	----------	----------	136	1,329
Business policies	248	2,273	22	84	----------	----------	270	2,357
Production to meet market demand	229	2,131	30	121	----------	----------	259	2,252
Reduction of market losses	166	1,622	12	32	----------	----------	178	1,654
Use of current market information	299	2,932	25	107	----------	----------	324	3,039
Standardizing	257	1,789	34	202	----------	----------	291	1,991
Processing or manufacturing	51	244	13	92	----------	----------	64	336
Packaging and grading	278	1,433	26	135	----------	----------	304	1,568
Loading	190	1,032	17	35	----------	----------	207	1,067
Transporting	142	834	3	11	1	1	146	846
Warehousing	80	534	2	3	----------	----------	82	537
Keeping members informed	349	3,284	26	126	----------	----------	375	3,410
Merging into larger units	80	963	4	42	----------	----------	84	1,005
Farms or homes whose operators were not in associations assisted with problems of standardizing	166	27,665	64	11,143	----------	----------	230	38,808
Farms or homes whose operators were not in associations assisted with problems of packaging and grading	217	24,501	43	7,475	1	7	261	31,983

See footnotes at end of table.

TABLE 9.—*Results of cooperative extension work, 1930*—Continued

Project or line of work	Reported by county agricultural agents		Reported by home demonstration agents		Reported by club agents [1]		Total of all lines of work	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Marketing—Continued.								
Farms or homes whose operators were not in associations assisted with problems of use of current market information	263	89, 320	36	6, 609	1	4	300	95, 933
Foods and nutrition:								
Adult result demonstrations	103	10, 290	772	88, 479	2	7	877	98, 776
Junior projects completed in food selection and preparation [3]	414	13, 431	864	83, 220	151	14, 186	1, 429	110, 837
Junior projects completed in food preservation [3]	315	6, 815	823	69, 688	139	5, 902	1, 277	82, 405
Homes in which assistance was given in planning family food budget	94	13, 158	635	59, 852	11	386	740	73, 396
Homes in which food expenditures were budgeted	49	2, 742	343	12, 479	3	119	395	15, 340
Homes in which family meals were balanced	107	18, 253	674	76, 919	7	428	788	95, 600
Homes in which home-packed lunches were improved	87	5, 204	771	61, 690	54	2, 509	912	69, 403
Schools in which recommendations for a hot dish or school lunch were followed	110	718	566	4, 547	52	648	728	5, 913
Homes in which improved methods in child feeding were used	98	13, 332	682	56, 507	7	403	787	70, 242
Individuals adopting recommendations for corrective feeding	85	15, 134	647	65, 410	13	637	745	81, 181
Jars of canned products preserved by junior club members	286	328, 866	862	2, 789, 044	122	386, 501	1, 270	3, 504, 411
Child training and care:								
Adult result demonstrations	7	514	198	8, 107			205	8, 621
Junior projects completed [3]			62	4, 495	3	13	65	4, 508
Homes in which—								
Habits of school children were improved	16	3, 081	200	13, 978	1	8	217	17, 067
Positive methods of discipline were substituted for negative ones	11	1, 332	178	7, 943			189	9, 275
Play equipment was provided	6	740	171	3, 768			177	4, 508
Physical adjustments were made to better meet children's needs	13	579	206	8, 544			219	9, 123
Better adult habits were adopted with respect to development of children	14	1, 890	218	13, 416			232	15, 306
Clothing:								
Adult result demonstrations	84	5, 271	629	83, 681			713	88, 952
Junior projects completed [3]	675	53, 814	1, 040	124, 954	168	30, 888	1, 883	209, 656
Women improving construction of clothing	163	27, 076	915	146, 778	1	150	1, 079	174, 004
Women using a clothing budget	35	1, 539	300	12, 350			335	13, 889
Women making garments for themselves	136	18, 086	940	144, 551	2	366	1, 078	163, 003
Women improving children's clothing	100	9, 622	644	53, 809			744	63, 431
Women following recommendations in improving care, renovation, and remodeling of clothing	125	17, 415	775	90, 906			900	108, 321
Home management:								
Adult result demonstrations	59	2, 120	560	35, 251			619	37, 371
Junior projects completed [2]	39	822	269	16, 327	14	323	322	17, 472
Homes in which home accounts were kept	47	1, 433	386	12, 339	4	29	437	13, 801
Homes in which expenditures were budgeted in relation to income	25	586	265	6, 700	3	31	293	7, 317

Homes in which recommended methods in buying for the home were followed	32	7,183	310	26,026	1	51	343	33,260
Women following recommended schedule for home activities	46	4,584	356	18,762	3	208	405	23,554
Kitchens rearranged for convenience	84	4,694	789	25,612	3	25	876	30,331
Homes in which—								
Labor-saving equipment was obtained	87	6,610	758	34,257	3	29	848	40,896
Laundering methods were adopted	34	1,605	331	12,760	5	246	370	14,61[illegible]
Recommended methods in care of the house were adopted	66	14,362	475	42,514	4	333	545	57,209
Assistance was given in an analysis of home conditions with reference to a standard of living	28	9,776	303	29,453	1	15	332	39,244
Assistance was given in making adjustments in home making to gain a more satisfactory standard of living	52	15,689	404	54,009	1	6	457	69,704
House furnishings:								
Adult result demonstrations	42	2,099	678	44,997	2	224	722	47,320
Junior projects completed [3]	178	3,948	723	44,012	90	1,611	991	49,571
Women improving—								
The selection of household furnishings	110	27,288	763	72,418	2	205	875	99,911
Methods of repairing, remodeling, or refinishing of furniture	96	8,668	797	53,550	1	3	894	62,221
Treatment of windows	85	8,461	782	44,991	2	205	869	53,657
Arrangement of rooms	90	18,400	766	57,758	3	217	859	76,375
Treatment of walls, woodwork, and floors	92	12,114	781	46,003	2	21	875	58,138
Home health and sanitation:								
Adult result demonstrations	30	568	296	24,295	1	1	327	24,864
Junior projects completed [3]	78	4,113	401	54,618	49	9,079	528	67,810
Club members not in special health clubs who participated in health-improvement work	119	18,256	421	56,773	58	12,457	598	87,486
Individuals following recommendations as to complete health examination	80	6,306	475	57,604	37	3,635	592	67,545
Individuals improving health habits	104	10,617	638	107,347	47	7,001	789	124,965
Individuals improving posture	65	3,498	549	59,781	49	5,708	663	68,987
Individuals adopting positive preventive measures to improve health	50	25,496	397	136,578	12	868	459	162,942
Homes in which better home-nursing procedure was adopted	34	3,246	288	16,699	1	1	323	19,946
Homes where sanitary closets or outhouses were installed	44	428	364	9,769			408	10,197
Homes screened	40	1,043	411	16,617	1	4	452	17,664
Homes in which other methods were followed for control of flies, mosquitoes, and other insects	55	2,766	374	29,661			429	32,427
Bees:								
Adult result demonstrations	210	1,334	15	170			225	1,504
Junior projects completed [3]	117	584	14	112	23	92	154	788
Weeds:								
Adult result demonstrations	496	8,887	12	1,059	1	4	509	9,950
Junior projects completed [3]	6	49	9	1,573	4	242	19	1,864
Handicraft:								
Adult result demonstrations	19	367	254	20,398			273	20,765
Junior projects completed [3]	84	3,834	217	20,046	60	4,523	361	28,403
Miscellaneous:								
Adult result demonstrations	97	1,497	87	10,105			184	11,602
Junior projects completed [3]	96	1,319	79	8,313	58	1,928	233	11,560
Community activities:								
Communities surveyed or scored	248	3,010	341	4,388	4	56	593	7,454
Clubhouses, permanent camps, etc., built	122	185	134	251	5	5	261	441

See footnotes at end of table.

TABLE 9.—*Results of cooperative extension work, 1930*—Continued

Project or line of work	Reported by county agricultural agents		Reported by home demonstration agents		Reported by club agents [1]		Total of all lines of work	
	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number	Agents reporting	Number
Community activities—Continued.								
Community rest rooms established	30	40	75	124	----------	----------	105	164
Community or county-wide pageants or plays presented	297	1,606	445	2,624	23	154	765	4,384
Communities developing recreation	339	2,894	530	5,598	12	185	881	8,677
Communities assisted in improving hygienic practices	178	1,465	400	4,681	5	72	583	6,218
School or other community grounds landscaped	386	1,299	487	2,235	8	18	881	3,552
4-H clubs engaging in community activities	540	4,187	479	3,871	52	585	1,071	8,643
Different communities assisted in community work	688	6,781	701	9,259	40	454	1,429	16,494
Total:								
Adult result demonstrations	----------	489,591	----------	443,766	----------	825	----------	934,182
Junior projects completed [3]	----------	314,260	----------	538,757	----------	118,291	----------	971,308

[1] Includes club work in counties without extension agents, reported by State club leaders.
[2] Per cent.
[3] Boys' and girls' club members.
[4] Pounds.
[5] Dollars.

TABLE 10.—*Extension work with boys and girls, as reported by all county extension agents, 1930*

Junior clubs	56,180
Different boys enrolled	333,197
Different girls enrolled	489,517
Total enrollment	822,714
Different boys completing	222,472
Different girls completing	331,873
Total completing	554,345

BY PROJECTS [1]

Project	Boys enrolled	Girls enrolled	Boys completing	Girls completing	Units involved in club work	Quantity produced
					Acres	
Corn	47,042	1,250	30,652	799	52,019	1,542,885 bushels.
Wheat	720	17	494	15	4,789	50,045 bushels.
Oats	733	24	496	22	2,110	43,426 bushels.
Rye	60	----------	33	----------	41	675 bushels.
Barley	188	1	144	----------	643	9,819 bushels.
Other cereals	3,945	351	2,517	208	5,488	105,932 bushels.
Alfalfa	614	78	514	71	1,223	651 bushels. 1,177 tons.
Sweetclover	51	2	33	1	110	65 tons.
Other clovers	48	----------	15	----------	63	46 tons.
Vetch	655	23	494	22	505	2,426 bushels. 67 tons.
Lespedeza	80	----------	61	----------	121	75 bushels. 16 tons.
Pastures	481	4	234	3	579	
Soybeans	1,428	126	1,133	92	1,830	6,576 bushels. 1,540 tons.
Cowpeas	1,253	83	982	56	1,264	10,052 bushels. 1,060 tons.
Velvetbeans	62	15	31	10	68	567 bushels. 115 tons.
Field beans	745	66	604	47	696	15,331 bushels.
Peanuts	5,195	279	3,049	154	2,680	56,110 bushels.
Other legumes	436	5	292	4	298	1,563 bushels. 332 tons.
Potatoes	16,193	1,441	11,811	961	5,336	617,037 bushels.
Sweetpotatoes	4,994	350	3,105	193	2,257	207,594 bushels.
Cotton	36,753	1,652	22,412	938	30,055	21,569,954 pounds.
Tobacco	6,703	642	4,180	348	3,726	1,710,410 pounds.
Other special crops	1,453	168	960	102	1,166	
Home gardens	27,270	98,562	17,543	56,125	22,298	
Market-gardening, truck, and canning crops.	3,479	10,885	2,251	6,882	3,490	
Beautification of home grounds	3,753	59,099	2,242	32,280	----------	
Tree fruits	947	2,741	574	1,933	1,728	
Bush and small fruits	890	3,324	681	2,286	782	
Grapes	170	1,464	116	838	180	
Forestry	6,826	2,068	4,248	1,131	11,297	
Rural engineering	6,879	3,720	4,411	2,290	----------	
					Birds	
Poultry	46,480	54,586	28,916	32,603	2,272,741	
					Animals	
Dairy cattle	42,015	6,932	31,422	5,132	50,507	
Beef cattle	14,807	1,833	11,215	1,564	15,341	
Sheep	9,447	1,736	7,019	1,373	28,775	
Swine	51,101	3,788	33,423	2,656	78,750	
Horses and mules	799	43	512	28	769	
Farm management	9,646	2,384	5,265	1,183	----------	
Food preparation	4,798	170,566	3,497	107,340	----------	
					Jars	
Food preservation	938	142,852	445	81,960	3,504,411	
Child training and care	613	7,894	392	4,116	----------	
Clothing	1,196	301,354	782	208,874	----------	
Home management	598	29,259	453	17,019	----------	
House furnishings	729	91,247	418	49,153	----------	
Home health and sanitation	9,940	97,787	6,326	61,484	----------	
Beekeeping	1,095	212	644	144	----------	
Weeds	239	1,974	208	1,656	----------	
Handicraft	11,230	30,478	7,900	20,503	----------	
Miscellaneous	3,670	12,867	2,583	8,977	----------	
Total	389,387	1,146,232	257,732	713,576	----------	

[1] One club member may engage in two or more projects. The sum of the projects is therefore greater than the number of different clubs and club members involved.

TABLE 11.—*Farmers' institutes conducted by extension divisions of colleges of agriculture, year ended June 30, 1930, and totals, 1926–1929*

State	Institutes	Days conducted	Sessions	Attendance	Different persons who gave lectures: From extension staff	From experiment station staff	From State department of agriculture staff	From special force employed for institutes	Total number of lecturers	State appropriation used	Other funds used
	Number	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*		
Georgia	20	20	40	2,291	4	------	------	4	8	$394.82	----------
Indiana	437	569	1,138	162,920	5	7	------	41	53	13,704.85	$19,465.07
New York	82	82	175	5,540	7	------	------	11	18	3,836.87	----------
Ohio	745	1,392	3,584	693,561	2	2	------	83	87	22,215.00	15,400.00
South Dakota	31	51	117	13,774	11	1	------	4	16	1,004.60	792.06
Wisconsin	690	754	1,547	119,059	30	5	9	33	77	30,000.00	----------
Total, 1930	2,005	2,868	6,601	997,145	59	15	9	176	259	71,156.14	35,657.13
1929	2,118	2,933	6,410	1,021,292	85	23	15	192	315	70,739.62	37,618.83
1928	1,972	2,971	6,872	1,095,436	117	34	8	180	339	73,542.07	37,836.52
1927	1,985	2,880	6,603	962,211	104	12	8	184	308	59,645.74	28,452.53
1926	2,130	2,934	6,556	969,864	93	15	3	215	326	63,022.83	25,139.60

TABLE 12.—*Farmers' institutes conducted by State departments of agriculture, year ended June 30, 1930, and totals, 1926–1929*

State	Institutes	Days conducted	Sessions	Attendance	Different persons who gave lectures: From extension staff	From experiment station staff	From State department of agriculture staff	From special force employed for institutes	Total number of lecturers	State appropriation used	Other funds used
	Number	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*	*Number*		
Illinois	215	301	902	104,370	------	35	2	7	[1] 184	$30,489.19	$4,825.00
Iowa	89	308	756	139,904	------	------	------	------	[2] 194	7,771.54	23,109.79
Maine	275	275	310	28,000	------	------	------	4	[3] 16	3,000.00	----------
Total, 1930	579	884	1,968	272,274	------	35	2	11	[3] 394	41,260.73	27,934.79
1929	482	1,008	2,619	245,192	------	37	12	147	[3] 414	36,659.65	22,613.86
1928	573	849	2,154	258,407	119	40	20	241	420	39,993.96	24,429.59
1927	275	545	1,415	201,034	3	37	5	129	[3] 454	68,032.53	14,000.00
1926	119	1,061	2,256	192,756	------	37	12	172	[3] 464	70,021.46	31,452.96

[1] Includes 7 from State departments other than agriculture and farmers' institutes and also 133 from sources other than those mentioned.

[2] No records were kept other than the total, but the statement was made that the extension, college, and experiment station staffs together furnished more than half the number of lecturers reported.

[3] Includes lecturers from sources other than those mentioned.

TABLE 13.—*Number of counties with women county extension agents (white, home demonstration work) on July 1, 1914–1930*

State	Number of counties	Counties having agents on July 1—																
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Alabama	67	18	19	27	28	67	54	32	36	34	34	35	37	38	38	39	41	42
Arizona	14					3	6	6	8	10	9	11	9	8	9	[1] 8	10	11
Arkansas	75	15	20	31	47	65	58	42	34	32	38	42	39	35	42	46	56	53
California	58					24	8	10	10	16	21	23	22	23	26	25	[1] 40	[1] 33
Colorado	63			2		7	3	2	1	2	2	4	2	6	5	11	16	15
Connecticut	8				5	8	6	6	3	5	6	6	7	6	6	6	8	8
Delaware	3				1	3	2										3	3
Florida	67	24	27	28	35	54	42	29	28	29	24	31	30	32	30	28	35	33
Georgia	161	29	48	45	57	125	93	66	66	70	68	64	61	61	58	70	77	72
Idaho	44					24	4	5	5	21	30	30	27	18	10	[1] 43	[1] 44	[1] 43
Illinois	102			1		88	17	11	11	11	16	21	21	22	22	20	24	29
Indiana	92					22	8	5	3	2	2	1	1	1	1	1	8	8
Iowa	99					96	23	19	21	18	17	13	15	12	14	12	22	[1] 27
Kansas	105					14	8	9	7	8	9	10	15	17	16	23	28	31
Kentucky	120	9	19	24	27	96	74	18	19	26	24	24	24	25	21	20	26	26
Louisiana	64	13	13	18	20	33	32	24	25	26	28	28	24	25	25	38	37	36
Maine	16					14	2	5	10	14	15	15	15	15	15	15	16	16
Maryland	23	5	6	10	13	22	23	21	17	16	17	18	19	19	18	20	23	23
Massachusetts	14			1	6	12	10	9	9	11	9	10	11	11	11	11	11	11
Michigan	83			1	1	24	13	12	10	8	7	7	5	5	5	6	9	9
Minnesota	87					39	8	8	7	4	3	8	8	8	6	4	9	10
Mississippi	82	33	33	32	49	71	64	53	35	48	51	45	44	43	47	50	69	56
Missouri	114					48	20	11	14	13	8	11	9	9	7	12	14	18
Montana	56					18	11	9	7	11	7	5	6	6	7	12	12	15
Nebraska	93				2	30	10	7	7	3	3	2	2	1	1		10	10
Nevada	17			1		10	5	5	6	4	4	4	9	9	6	8	9	[1] 9
New Hampshire	10				2	9	6	3	5	6	8	7	8	8	9	10	10	10
New Jersey	21			1		8	5	8	7	9	8	12	11	12	12	13	18	19
New Mexico	31					11	5	4	4	2	4	4	5	4	5	4	10	[1] 17
New York	62			1	3	38	24	22	28	31	32	35	38	37	34	35	39	41
North Carolina	100	27	34	44	48	72	66	59	47	49	50	48	49	49	49	49	56	56
North Dakota	53				2	33	5	4	2	6	2	2	1	1	1	1	7	8
Ohio	88			1		13	5	2	7	10	8	11	15	15	16	19	23	26
Oklahoma	77	19	24	22	23	50	46	40	36	37	42	50	44	47	49	50	57	59
Oregon	36					15	5	5	6	4	4	3	3	3	2	3	5	6
Pennsylvania	67			1		48					28	28	28	54	63	[1] 65	[1] 65	[1] 65
Rhode Island	5					4		2	3	5	2	2	2	2	2		[1] 5	[1] 5
South Carolina	46	21	24	31	36	44	45	45	36	36	36	38	38	34	36	35	39	46
South Dakota	69					42	3	3	1	1	15	19	32	32	35	[1] 34	[1] 47	[1] 47
Tennessee	95	18	24	31	49	94	77	41	26	25	28	27	26	27	27	27	34	49
Texas	254	26	27	38	31	67	69	55	38	52	79	91	88	90	88	89	103	118

[1] Some agents cover two or more counties.

TABLE 13.—*Number of counties with women county extension agents (white, home demonstration work) on July 1, 1914–1930*—Continued

State	Number of counties	Counties having agents on July 1—																
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Utah	29			2	2	14	4	6	3	15	4	5	11	9	8	[1] 6	[1] 9	[1] 10
Vermont	14					7	5	4	6	9	10	9	7	5	5	8	11	11
Virginia	100	17	22	25	38	52	36	28	23	30	34	36	35	34	34	33	36	40
Washington	39					22	6	8	7	7	6	5	5	5	5	6	11	11
West Virginia	55	5	10	12	12	33	22	12	8	18	15	23	15	17	17	18	28	26
Wisconsin	71					17	4	2	1	1	1	1	1	1	1	2	4	4
Wyoming	23					5	7	7	6	6	6	6	5	5	6	6	9	8
Hawaii	5																3	4
Total	3,077	279	350	430	537	1,715	1,049	784	699	801	874	930	929	946	950	1,041	1,286	1,333

[1] Some agents cover two or more counties.

TABLE 14.—*Number of counties with men county extension agents (white) on July 1, 1914–1930*

State	Number of counties	Counties having agents on July 1—																
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Alabama	67	67	67	65	62	66	65	55	55	55	54	59	59	57	56	61	63	63
Arizona	14	--------	3	6	7	11	11	10	9	11	11	10	12	12	12	12	12	12
Arkansas	75	45	52	53	61	68	66	58	44	40	47	45	50	48	63	64	64	63
California	58	4	11	13	17	33	35	35	37	40	41	40	43	41	41	40	39	41
Colorado	63	13	13	19	16	29	27	24	24	26	23	28	20	22	24	27	32	33
Connecticut	8	1	6	7	8	8	8	8	8	8	7	8	8	8	8	8	8	8
Delaware	3	--------	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
Florida	67	25	36	33	37	53	47	32	31	33	37	33	36	41	45	48	47	45
Georgia	161	80	81	83	117	120	134	97	85	98	88	89	121	90	95	101	96	108
Idaho	44	2	3	7	11	27	32	34	32	28	21	19	16	18	23	23	24	26
Illinois	102	14	18	20	22	53	63	81	85	85	94	95	95	95	96	94	95	93
Indiana	92	27	31	32	40	83	76	68	82	85	86	82	79	82	81	85	85	86
Iowa	99	9	11	16	26	97	99	99	99	99	99	98	99	97	98	98	99	99
Kansas	105	9	39	56	53	67	53	51	59	56	58	57	63	64	64	66	71	74
Kentucky	120	28	39	47	45	90	71	53	61	61	59	67	72	71	70	86	90	85
Louisiana	64	41	43	43	42	58	55	41	38	45	45	46	48	51	52	56	54	59
Maine	16	--------	3	4	9	16	16	16	16	16	16	16	16	16	16	16	16	16
Maryland	23	8	13	16	23	22	23	22	23	22	23	23	23	23	23	22	23	23
Massachusetts	14	1	10	9	11	13	13	11	11	11	11	12	11	11	11	11	11	11
Michigan	83	11	17	22	30	71	63	60	64	69	64	57	57	54	53	55	62	65
Minnesota	87	27	23	19	16	85	86	82	83	77	67	62	58	61	60	62	63	62
Mississippi	82	48	49	44	53	79	75	71	50	56	56	56	54	56	60	63	77	66
Missouri	114	13	15	14	15	71	52	47	58	55	54	53	50	69	65	74	[1] 75	[1] 75
Montana	56	4	8	7	12	23	24	27	26	26	24	23	23	26	29	30	31	31
Nebraska	93	5	8	9	8	79	54	39	46	42	42	41	43	40	39	39	45	46
Nevada	17	--------	--------	--------	6	8	4	6	7	9	11	11	8	8	9	11	14	13
New Hampshire	10	1	5	8	9	10	10	9	10	10	10	10	10	10	10	10	10	10
New Jersey	21	4	7	11	10	17	18	18	18	18	18	19	18	18	19	19	19	19
New Mexico	31	--------	8	9	11	25	26	22	19	18	22	20	21	19	20	21	22	21
New York	62	25	29	36	41	56	55	55	55	55	55	56	55	55	55	55	55	55
North Carolina	100	51	64	65	69	91	87	77	59	66	73	76	74	74	78	80	84	82
North Dakota	53	17	15	15	17	38	32	28	36	36	33	34	33	33	33	33	31	34
Ohio	88	8	10	12	20	63	65	63	80	83	85	81	85	83	80	78	79	78
Oklahoma	77	40	56	59	62	77	70	73	71	74	67	61	65	68	69	69	70	72
Oregon	36	10	12	13	14	24	23	26	26	24	22	21	28	28	26	27	28	29
Pennsylvania	67	10	14	22	45	53	40	54	57	63	60	63	63	64	65	65	65	65
Rhode Island	5	--------	--------	4	4	5	4	4	4	4	4	4	5	5	3	4	[1] 5	[1] 5
South Carolina	46	43	43	42	40	43	45	45	42	42	38	39	40	39	39	40	42	45
South Dakota	69	3	5	11	13	59	36	39	43	48	43	36	34	35	34	33	32	32
Tennessee	95	36	38	48	57	91	76	45	38	41	48	54	50	53	58	61	62	81

[1] Some agents cover two or more counties.

TABLE 14.—*Number of counties with men county extension agents (white) on July 1, 1914–1930*—Continued

State	Number of counties	Counties having agents on July 1—																
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Texas	254	98	99	90	92	178	168	127	128	143	148	149	155	164	164	162	166	178
Utah	29	8	10	8	15	28	22	21	19	19	22	21	18	19	19	20	22	22
Vermont	14	7	9	11	13	13	13	12	13	13	11	13	12	13	13	13	12	13
Virginia	100	53	55	51	53	75	71	57	61	67	70	65	65	67	70	71	73	77
Washington	39	7	10	13	22	34	29	32	31	28	24	25	26	26	26	27	28	29
West Virginia	55	13	27	29	45	48	48	40	31	40	39	39	36	44	43	44	43	43
Wisconsin	71	9	12	13	22	59	41	42	50	50	47	47	48	52	54	51	53	56
Wyoming	23	3	6	8	13	15	13	14	16	16	16	18	16	16	17	18	19	20
Hawaii	5	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	4	4
Total	3,077	928	1,136	1,225	1,436	2,435	2,247	2,033	2,043	2,114	2,096	2,084	2,124	2,149	2,191	2,256	2,323	2,376

FUNDS, 1930

Expenditures of Federal funds and funds from sources within the States and Territories for cooperative extension work during the fiscal year ended June 30, 1930. amounted to $24,706,761.64, which exceeded the amount expended for the work in 1929 by $1,420,112.87. Of the additional funds expended, $344,-701.15 came from Federal sources, principally the increase of $500,000 in Capper-Ketcham funds. The increased Federal funds were offset in part by a reduction in emergency funds available for employing agents in counties in the flood-devastated regions; $638,624.48 was from State and college sources; and $436,787.24 from county appropriations, local organizations, and individuals. Of the total amount, $24,266,064.87, or 98.2 per cent, was spent in the 48 States and the Territories of Hawaii and Porto Rico, and $440,696.77, or 1.8 per cent, in the administrative activities of the Federal office in Washington, D. C. Of the total funds, $9,173,413.46, or approximately 37.1 per cent, was from Federal sources; $7,172,266.60, or 29 per cent, from State and college sources; $7,099,-140.59, or 28.8 per cent. from county appropriations; and $1,261,940.99. or 5.1 per cent, from local organizations and individuals.

The amount expended for county extension agents was $15,317,609, or 62 per cent; for State subject-matter specialists, $4,738,798, or 19.2 per cent; for administration and supervision in the States and Territories, $4,209,658, or 17 per cent.

Ten States and the Territory of Hawaii were unable to expend their entire allotments of Federal Smith-Lever and Capper-Ketcham funds and had unexpended balances on June 30, 1930, as shown in Table 15.

TABLE 15.—*Unexpended balances of Federal Smith-Lever and Capper-Ketcham funds, June 30, 1930*

State	Unexpended balances		State	Unexpended balances	
	Federal Smith-Lever	Federal Capper-Ketcham		Federal Smith-Lever	Federal Capper-Ketcham
Colorado	$5.00		Oregon		$6.10
Hawaii		$977.73	Pennsylvania		11,270.27
Idaho		.10	Rhode Island	$703.17	2,303.99
Minnesota		85.05	Washington		4,831.15
Montana		451.56			
New York	178.65	41.79	Total	886.82	21,258.39
Ohio		1,290.65			

Two States expended more than 20 per cent of their Federal Capper-Ketcham funds for purposes other than salaries of county extension agents and refunded the excess amounts to the Federal Treasury, Louisiana refunding $60.36 and Oregon refunding $1.22.

The Legislature of Alabama, on February 5, 1931, assented to the provisions and requirements of the Capper-Ketcham Act of May 22, 1928.

Of the Federal Capper-Ketcham funds expended during the year, approximately 88.6 per cent was for salaries of county extension agents, and about 50 per cent was for women extension workers.

Statements of the funds expended in each State and in the Territories of Hawaii and Porto Rico by items of expense, lines of work, and sources, are given in Tables 16 to 27.

TABLE 16.—*Expenditures from the United States appropriation of May 8, 1914 (Federal Smith-Lever) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by items of expense, and totals for 1915–1929*

State	Total appropriation	Personal services—salaries and labor	Printing, binding, and cuts for publications	Supplies and materials	Communication service	Transportation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscellaneous	Unexpended balance
Alabama	$213,041.91	$182,957.03	$1,342.70	$2,371.06	$1,920.76	$113.28		$1,846.67	$22,204.64	$285.77	
Arizona	33,920.44	29,382.19	1,340.71	368.32	176.79	20.07		246.04	2,386.32		
Arkansas	171,397.98	112,621.30	7,508.76	7,308.68	1,974.75	315.39		4,175.96	34,778.08	2,715.06	
California	130,921.71	104,278.95		5,392.44	162.78	8.53		752.62	19,691.27	635.12	
Colorado	63,703.73	49,174.15	1,870.13	3,577.76	1,242.59	184.51		635.05	7,003.37	11.17	$5.00
Connecticut	59,057.58	59,057.58									
Delaware	21,288.65	13,545.34	1,370.54	1,717.69	775.02	23.34		814.65	2,993.08	48.99	
Florida	77,646.71	77,646.71									
Georgia	249,382.01	249,381.51			.50						
Idaho	44,541.76	33,972.08	495.55	750.34	229.52	15.02		39.90	9,039.35		
Illinois	239,624.34	193,745.95	6,915.60	8,364.55	2,234.67	130.52		3,559.49	24,142.32	531.24	
Indiana	169,833.14	144,070.45	1,260.45	3,304.94	400.00	.59		779.26	19,983.70	33.75	
Iowa	178,775.89	175,695.15							3,080.74		
Kansas	137,122.84	131,263.85	439.95	2,762.27	14.26			1,211.97	1,390.39	40.15	
Kentucky	206,883.86	74,996.76	5,197.30	6,491.81	1,716.07	323.47	$3,600.00	1,344.01	112,961.93	252.51	
Louisiana	139,226.59	136,134.45	188.52	1,066.50	38.24	10.00		1,490.13	298.75		
Maine	61,724.50	46,694.93	1,299.10	710.91	595.59	16.64		1,455.38	10,939.68	12.27	
Maryland	74,068.49	65,806.45	785.55	434.10	137.14	21.09	62.75		6,800.06	21.35	
Massachusetts	32,316.26	31,842.43			1.75				472.08		
Michigan	167,549.32	167,549.32									
Minnesota	157,466.02	136,604.06		15.36	140.96	3.83			20,701.81		
Mississippi	181,201.86	155,665.16	2,557.92		180.79				22,056.99	741.00	
Missouri	210,645.26	168,285.51	5,662.26	3,382.11	540.20	128.44		1,775.13	30,772.51	99.10	
Montana	51,613.89	49,840.18	1,000.00		5.81	1.23			766.67		
Nebraska	108,389.25	108,194.20	120.05					75.00			
Nevada	16,862.72	12,468.65	583.66	978.90	830.56	49.02		328.67	1,562.51	60.75	
New Hampshire	28,033.64	26,724.33	121.22	33.08	.21	300.00	700.00	21.00	133.80		
New Jersey	84,378.43	47,412.23	2,175.48	8,165.72	1,306.62	72.50	742.51	3,914.35	20,098.72	490.30	
New Mexico	42,616.21	33,612.18	8.99	237.89	91.19	20.67		190.86	8,433.51	20.92	
New York	208,241.56	165,964.72	5,442.63	3,747.76	1,451.16	108.01		1,676.07	29,504.47	168.09	178.65
North Carolina	238,426.37	238,426.37									
North Dakota	71,683.39	48,179.62	670.12	3,425.56	444.59	167.58		792.87	17,973.37	29.68	
Ohio	239,917.62	183,545.30	11,716.80	4,913.53	3,419.54	435.97		2,548.59	33,127.19	210.70	
Oklahoma	174,389.77	127,149.33	2,671.54	6,542.43	3,364.00	87.32		619.11	33,930.54	25.50	
Oregon	53,324.53	35,617.74	907.51	2,440.26	1,213.76	17.03		257.29	12,766.34	104.60	
Pennsylvania	353,641.38	281,066.44	725.67	5,677.78	1,623.14	161.23		86.81	63,490.55	809.76	
Rhode Island	11,680.24	5,594.44	273.50	1,247.89	46.08	1.40		933.83	2,854.32	25.61	703.17
South Carolina	163,451.23	104,317.99	5,875.17	8,903.34	4,724.83	138.59	621.28	912.83	36,409.25	1,547.95	
South Dakota	69,037.45	68,902.25							135.20		
Tennessee	200,653.31	172,274.00	8,268.25	4,525.50	913.58	165.82	923.55	1,641.85	11,482.26	458.50	
Texas	357,874.42	295,309.15	4,466.52	6,250.30	2,660.26	286.84		1,626.92	47,157.36	117.07	

Utah	35,816.87	32,453.58	----------	449.33	11.60	2.21	----------	125.90	2,774.25	----------	----------
Vermont	36,770.93	29,833.77	175.08	1,484.71	614.82	150.29	----------	290.32	4,090.55	131.39	----------
Virginia	190,554.95	174,715.21	----------	6,716.57	1,461.90	408.87	99.46	153.65	6,936.52	62.77	----------
Washington	77,121.21	61,832.06	2,126.61	3,315.26	925.03	252.78	----------	1,170.83	7,392.12	106.52	----------
West Virginia	130,873.37	121,071.74	407.87	18.25	0.46	----------	----------	----------	9,375.05	----------	----------
Wisconsin	163,204.06	159,560.39	2,813.52	624.64	1.40	----------	----------	----------	204.11	----------	----------
Wyoming	25,133.15	24,637.43	----------	41.00	4.05	----------	----------	----------	450.67	----------	----------
Hawaii	27,905.20	18,766.98	----------	984.76	334.01	26.76	----------	950.77	6,353.57	488.35	----------
Total, 1930	6,182,936.00	5,167,841.59	88,785.23	118,743.30	37,930.98	4,168.84	6,749.55	38,443.78	709,099.97	10,285.94	886.82
1929	6,172,180.80	4,913,505.82	106,232.06	127,660.85	45,542.41	5,886.00	9,200.78	47,871.48	893,319.92	10,558.16	12,403.32
1928	5,880,000.00	4,747,854.16	79,362.27	110,867.79	40,951.79	4,982.42	9,629.45	31,777.20	841,785.79	11,584.14	1,204.99
1927	5,880,000.00	4,708,815.40	81,653.50	118,545.59	49,676.60	6,275.75	10,420.66	37,492.64	854,264.87	11,291.73	1,563.26
1926	5,880,000.00	4,597,073.13	99,177.47	125,510.84	41,196.91	6,285.97	11,071.82	39,043.21	927,124.07	10,935.48	22,581.10
1925	5,879,999.99	4,660,134.68	91,840.89	109,079.77	35,844.59	5,662.97	6,483.13	40,018.71	918,174.14	11,845.01	916.10
1924	5,880,000.00	4,583,765.05	86,152.30	106,380.09	40,964.27	5,483.23	8,945.15	38,726.37	983,709.00	5,479.55	20,394.99
1923	5,880,000.00	4,447,492.44	113,901.41	130,029.94	40,240.02	[1] 6,097.05	9,009.22	47,247.12	1,019,854.81	6,944.88	59,183.11
1922	5,580,000.00	4,265,041.66	107,237.37	106,177.73	40,165.09	----------	7,914.66	40,701.62	935,937.26	7,174.06	69,650.55
1921	5,080,000.00	3,727,417.45	96,897.63	115,770.50	47,829.09	----------	6,269.91	50,585,69	920,621.97	8,656.26	105,951.50
1920	4,580,000.00	3,210,273.50	113,311.71	127,097.40	42,254.14	----------	4,614.66	48,695.97	911,947.11	6,149.87	115,655.64
1919	2,580,000.00	1,660,720.95	105,120.93	134,166.83	43,054.00	----------	2,618.28	91,655.52	496,439.74	5,051.79	41,171.96
1918	2,080,000.00	1,381,547.05	76,910.28	109,656.02	39,627.12	----------	2,412.57	61,433.27	394,481.91	1,998.07	11,933.71
1917	1,580,000.00	1,140,061.93	43,927.84	52,587.62	20,041.81	----------	1,338.98	36,881.97	278,867.24	1,346.99	4,945.62
1916	1,080,000.00	755,165.64	27,867.77	40,863.34	12,154.06	----------	968.63	39,404.50	201,084.45	415.34	2,076.27
1915	480,000.00	329,143.14	8,241.16	15,463.39	5,539.85	----------	146.85	19,769.52	96,402.41	228.41	5,065.27

[1] Prior to 1923, transportation of things was included in communication service.

TABLE 17.—*Expenditures from the United States appropriation of May 8, 1914 (State Smith-Lever) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by items of expense, and totals for 1916–1929*

State	Total appropriation	Personal services—salaries and labor	Printing, binding, and cuts for publications	Supplies and materials	Communication service	Transportation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscellaneous	Unexpended balance
Alabama	$203,041.91	$155,626.91	$6,982.99	$5,938.50	$2,163.86	$643.76		$5,593.40	$25,919.02	$173.47	
Arizona	23,920.44	17,233.12	206.52	1,287.59	292.40	4.37		61.50	4,834.94		
Arkansas	161,397.98	155,509.39		1,923.99	661.57			1,333.53		1,969.50	
California	120,921.71	120,921.71									
Colorado	53,703.73	46,042.78	965.09	1,446.73	461.30	32.64		226.64	4,523.55		$5.00
Connecticut	49,057.58	31,202.68		757.86					17,097.04		
Delaware	11,288.65	5,288.65							6,000.00		
Florida	67,646.71	32,704.29	5,209.19	3,402.51	435.97	10.04		1,064.82	24,785.54	34.35	
Georgia	239,382.01	181,335.41	5,002.99	6,212.14	3,123.23	99.54	$1,650.00	2,622.48	39,335.72	.50	
Idaho	34,541.76	26,330.23	300.00	903.17	611.38	10.87			6,356.11	30.00	
Illinois	229,624.34	229,624.34									
Indiana	159,833.14	159,833.14									
Iowa	168,775.89	168,775.89									
Kansas	127,122.84	94,187.83							32,935.01		
Kentucky	196,883.86	196,883.86									
Louisiana	129,226.59	85,749.32	2,688.94	5,508.92	1,282.96	295.87	7.01	2,875.34	30,076.85	741.38	
Maine	51,724.50	26,305.69	44.12	2,215.64	605.24	85.13		565.11	21,842.10	61.47	
Maryland	64,068.49	51,636.10	1,396.42	1,623.65	654.46	956.68		373.98	7,330.70	96.50	
Massachusetts	22,316.26	22,316.26									
Michigan	157,549.32	157,549.32									
Minnesota	147,466.02	140,244.23			25.76				7,196.03		
Mississippi	171,201.86	154,417.49		4,306.80	1,619.89	84.64	667.95	1,558.62	8,123.47	423.00	
Missouri	200,645.26	172,057.09	4,939.35	4,528.62	1,466.24	99.24		704.70	16,181.07	668.95	
Montana	41,613.89	40,377.30							1,236.59		
Nebraska	98,389.25	67,960.46	300.86	6,978.24	1,830.38	360.07		4,497.00	16,089.23	373.01	
Nevada	6,862.72	4,989.60		208.93	15.76	3.42		55.90	1,588.61	.50	
New Hampshire	18,033.64	18,033.64									
New Jersey	74,378.43	74,255.02			123.41						
New Mexico	32,616.21	18,875.02	2,099.87	2,782.82	850.34	336.22	600.00	1,806.61	5,223.91	41.42	
New York	198,241.56	198,062.91									178.65
North Carolina	228,426.37	140,544.49	5,249.93	4,683.28	1,910.02	269.00	1,511.00	861.75	73,290.48	106.42	
North Dakota	61,683.39	58,727.75	336.29	99.11	3.66		2,000.00		516.58		
Ohio	229,917.62	205,765.67							24,151.95		
Oklahoma	164,389.77	163,675.75		208.12				505.90			
Oregon	43,324.53	43,324.53									
Pennsylvania	343,641.38	226,034.31	420.34	5,718.61	8,497.01	104.05	1,687.51	344.71	91,811.25	9,023.59	
Rhode Island	1,680.24	530.75		153.04	148.88	46.12		98.28			703.17
South Carolina	153,451.23	153,451.23									
South Dakota	59,037.45	26,574.38	2,233.11	5,395.16	1,147.30	216.16		1,153.90	22,107.38	210.06	
Tennessee	190,653.31	151,261.98	2,292.28	7,492.76	1,504.37	305.92	13.38	794.80	26,011.76	976.06	
Texas	347,874.42	335,731.58	910.84						11,232.00		

Utah	25,816.87	23,918.10	----------	465.67	107.66	----------	----------	95.50	1,229.94	----------	----------
Vermont	26,770.93	22,710.05	----------	190.22	201.83	22.69	360.00	82.04	3,194.50	9.60	----------
Virginia	180,554.95	106,332.94	5,547.99	2,463.25	749.68	26.19	----------	----------	65,390.25	44.65	----------
Washington	67,121.21	59,659.26	1,922.50	1,405.94	175.28	30.13	----------	11.66	3,916.44	----------	----------
West Virginia	120,873.37	115,181.63	----------	----------	11.30	----------	----------	----------	5,680.44	----------	----------
Wisconsin	153,204.06	108,950.93	936.37	3,466.20	3,634.95	----------	----------	43.90	36,171.71	----------	----------
Wyoming	15,133.15	15,000.01	----------	125.40	----------	----------	----------	7.74	----------	----------	----------
Hawaii	17,905.20	11,370.32	1,587.95	633.70	98.39	18.17	----------	995.30	3,163.87	37.50	----------
Total, 1930	5,692,936.00	4,823,075.34	51,573.94	82,526.57	34,414.48	4,060.92	8,496.85	28,335.11	644,544.04	15,021.93	886.82
1929	5,682,180.80	4,898,233.62	46,059.50	62,093.91	27,083.32	3,803.62	5,770.91	32,000.99	579,788.78	14,942.83	12,403.32
1928	5,400,000.00	4,709,385.48	40,461.46	42,744.30	26,028.16	2,331.92	5,237.79	18,891.78	545,679.20	8,034.92	1,204.99
1927	5,400,000.00	4,700,633.63	58,334.29	44,348.94	26,237.92	2,412.33	4,628.74	13,385.53	540,365.54	8,089.82	1,563.26
1926	5,400,000.00	4,711,692.12	42,923.43	47,014.19	30,780.71	4,717.07	5,051.17	10,962.57	538,576.17	7,465.67	816.90
1925	5,399,999.99	4,664,630.42	44,447.40	51,852.67	25,662.11	2,755.91	4,724.92	12,666.14	584,930.38	7,413.94	916.10
1924	5,400,000.00	4,637,018.08	60,057.95	46,053.65	29,212.57	4,409.56	6,075.61	17,207.77	568,349.42	11,220.40	20,394.99
1923	5,400,000.00	4,655,864.27	51,890.13	49,671.43	25,956.13	[1] 4,257.77	4,827.45	22,819.11	520,258.46	5,272.14	59,183.11
1922	5,100,000.00	4,254,787.62	74,254.76	49,834.16	27,459.91	----------	5,105.09	24,684.34	587,035.78	7,187.79	69,650.55
1921	4,600,000.00	3,850,788.52	76,823.58	40,298.04	16,461.40	----------	3,104.69	21,019.47	484,159.39	1,393.41	105,951.50
1920	4,100,000.00	3,382,628.44	58,956.38	46,471.18	26,754.12	----------	3,357.21	18,452.15	440,221.83	7,503.05	115,655.64
1919	2,100,000.00	1,484,785.07	55,540.79	77,990.43	28,237.75	----------	2,824.06	33,157.82	369,769.41	6,522.71	41,171.96
1918	1,600,000.00	1,189,520.31	40,130.89	46,437.58	20,826.08	----------	3,052.65	24,613.74	259,998.19	3,486.85	11,933.71
1917	1,100,000.00	825,004.97	34,822.25	32,507.55	12,441.66	----------	232.44	17,015.59	171,145.06	1,884.86	4,945.62
1916	600,000.00	455,471.00	15,198.34	21,505.74	5,397.94	----------	223.28	11,758.17	87,038.02	1,331.24	2,076.27

[1] Prior to 1923, transportation of things was included in communication service.

TABLE 18.—*Expenditures from United States appropriation authorized May 22, 1928 (Federal Capper-Ketcham), for cooperative agricultural extension work in each State and Hawaii for year ended June 30, 1930, by items of expense, and total for 1929*

State	Total appropriation	Personal services	Publications	Supplies	Communication service	Transportation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscellaneous	Unexpended balance
Alabama	$37,832.79	$35,645.70	$593.07	$853.72					$740.30		
Arizona	22,100.88	20,585.86		167.75	$24.98	$2.82		$47.30	1,269.67	$2.50	
Arkansas	34,175.28	33,769.81		353.42				52.05			
California	30,620.32	28,003.83							2,616.49		
Colorado	24,716.70	23,190.48	46.50	82.11	84.36	5.39			1,302.86	5.00	
Connecticut	24,308.64	23,837.58			60.60				410.46		
Delaware	20,991.46	20,141.50		77.40	1.38			35.55	735.63		
Florida	25,941.28	25,407.09		221.19				313.00			
Georgia	41,024.48	40,093.88							930.60		
Idaho	23,033.74	18,717.07		96.24	124.03	1.77		6.50	4,088.03		$0.10
Illinois	40,167.48	36,551.38		36.01	37.94	4.64			3,537.51		
Indiana	34,037.85	33,597.20		70.66					369.99		
Iowa	34,823.28	34,823.28									
Kansas	31,164.96	31,164.96									
Kentucky	37,291.95	37,291.95									
Louisiana	31,349.73	29,905.19	4.02	423.37	84.48	.42		264.00	607.89		60.36
Maine	24,542.86	19,651.51							4,891.35		
Maryland	25,627.02	25,177.77			1.42				447.83		
Massachusetts	21,960.00	21,960.00									
Michigan	33,837.26	33,837.26									
Minnesota	32,951.66	31,917.27		88.24		65.08		242.65	498.37	55.00	85.05
Mississippi	35,036.35	32,713.54			4.50				2,318.31		
Missouri	37,622.30	36,720.59		73.42	1.50				826.79		
Montana	23,654.87	21,778.06	312.25	83.18	1.98	7.09		590.93	429.82		451.56
Nebraska	28,641.35	28,641.35									
Nevada	20,602.75	19,405.00		33.76	.26	1.26	$9.02	52.75	1,100.70		
New Hampshire	21,583.90	21,522.84	61.06								
New Jersey	26,532.51	26,518.44			14.07						
New Mexico	22,864.62	20,973.02		154.25	54.55	2.53		17.35	1,661.92	1.00	
New York	37,411.20	37,354.34							15.07		41.79
North Carolina	40,062.27	40,062.27									
North Dakota	25,417.54	22,427.12		10.24	36.76	.91			2,942.06	.45	
Ohio	40,193.24	36,402.04	1,868.95	116.55					515.05		1,290.65
Oklahoma	34,438.05	34,433.76			4.29						
Oregon	23,805.11	23,636.99		28.76	19.60				112.44		7.32
Pennsylvania	50,181.39	38,911.12									11,270.27
Rhode Island	20,147.57	17,579.38						264.20			2,303.99
South Carolina	33,477.33	33,477.33									
South Dakota	25,185.15	25,169.34							15.81		
Tennessee	36,744.72	36,744.72									
Texas	50,553.17	50,553.17									
Utah	22,267.45	20,721.68	483.79	559.31	.85	3.90		162.95	334.97		
Vermont	22,351.25	21,815.59		41.08	1.77	1.32		36.38	455.11		

Virginia	35,857.81	34,714.87		205.04	228.30	33.23	10.64		659.48	6.25	
Washington	25,895.13	20,516.55		484.00	4.55	8.88		50.00			4,831.15
West Virginia	30,616.08	29,528.39			4.44				1,083.25		
Wisconsin	33,455.63	32,425.73		934.24	.60				95.06		
Wyoming	21,329.11	21,329.11									
Hawaii	21,572.53	18,641.91	646.84	438.20	28.89	2.75		197.00	623.46	15.75	977.73
Total, 1930	1,480,000.00	1,409,988.82	4,016.48	5,632.14	826.10	141.99	19.66	2,332.61	35,636.28	85.95	21,319.97
1929	980,000.00	827,862.48	4,837.43	6,016.62	1,559.87	270.05	22.24	4,018.15	45,691.60	739.21	88,982.35

TABLE 19.—*Expenditures from United States appropriation (State Capper-Ketcham), for cooperative agricultural extension work in each State and Hawaii for year ended June 30, 1930, by items of expense*

State	Total appropriation	Personal services	Publications	Supplies	Communication service	Transportation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscellaneous	Unexpended balance
Alabama	$17,832.79	$17,832.79									
Arizona	2,100.88	1,019.01		$10.38	$1.00				$1,070.49		
Arkansas	14,175.28	14,175.28									
California	10,620.32	10,620.32									
Colorado	4,716.70	4,656.70							60.00		
Connecticut	4,308.64	1,715.86			22.20				2,570.58		
Delaware	991.46	991.46									
Florida	5,941.28	5,941.28									
Georgia	21,024.48	21,024.48									
Idaho	3,033.74	1,678.71	$461.57	268.51	8.25	$2.36			606.24	$8.00	$0.10
Illinois	20,167.48	20,167.48									
Indiana	14,037.85	14,037.85									
Iowa	14,823.28	14,823.28									
Kansas	11,164.96	11,164.96									
Kentucky	17,291.95	17,291.95									
Louisiana	11,349.73	11,289.37									60.36
Maine	4,542.86	3,243.34		43.34	.42			5.45	1,250.31		
Maryland	5,627.02	5,627.02									
Massachusetts	1,960.00	1,960.00									
Michigan	13,837.26	13,837.26									
Minnesota	12,951.66	12,779.62							86.99		85.05
Mississippi	15,036.35	15,036.35									
Missouri	17,622.30								17,622.30		
Montana	3,654.87	3,203.31									451.56
Nebraska	8,641.35	4,536.14		937.17				530.92	2,610.72	26.40	
Nevada	602.75	454.45	7.00	124.45	7.65	4.55		4.65			
New Hampshire	1,583.90	1,583.90									
New Jersey	6,532.51	6,475.00			57.51						
New Mexico	2,864.62	1,633.08		16.15	32.26	18.24			1,162.14	2.75	
New York	17,411.20	17,369.41									41.79
North Carolina	20,062.27	20,062.27									
North Dakota	5,417.54	5,417.54									
Ohio	20,193.24	18,711.93							190.66		1,290.65
Oklahoma	14,438.05	10,516.58			1.84				3,919.63		
Oregon	3,805.11	3,797.79									7.32
Pennsylvania	30,181.39	8,539.37		788.52	2,397.28	27.14	$102.78		4,299.04	2,756.99	11,270.27
Rhode Island	147.57										147.57
South Carolina	13,477.33	13,477.33									
South Dakota	5,185.15	4,500.00			3.50				681.65		
Tennessee	16,744.72	16,625.30				119.42					
Texas	30,553.17	30,553.17									
Utah	2,267.45	2,267.45									

Vermont	2,351.25	1,616.72		238.49	.19				409.48	86.37	
Virginia	15,857.81	8,478.98	2,629.93	6.57	80.00				4,662.33		
Washington	5,895.13	1,063.98									4,831.15
West Virginia	10,616.08	8,039.83			2.88				2,573.37		
Wisconsin	13,455.63	9,687.76		35.85	31.17				3,700.85		
Wyoming	1,329.11	1,329.11									
Hawaii	1,572.53	500.00		31.05					33.75	30.00	977.73
Total, 1930	500,000.00	421.354.77	3,098.50	2,500.48	2,646.15	171.71	102.78	541.02	47,510.53	2,910.51	19,163.55

TABLE 20.—*Expenditures of funds from the United States appropriation of May 8, 1914 (Federal Smith-Lever) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects, and totals for 1915–1929*

State	Total	Administration	Printing and distribution of publications	County agent work	Home demonstration work [1]	Boys' and girls' club work	Home economics specialists [2 3]	Extension schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy	Foods and nutrition	Child care and training
Alabama	$213,041.91	$10,020.42	$1,373.70	$89,253.60	$43,392.75	$5,424.18		$4,238.18	$4,940.72	$4,940.73	$4,940.73		$3,300.00	$3,300.00	
Arizona	33,920.44	7,031.47	1,340.71	11,114.88	6,320.94	1,502.18			2,253.71	1,201.58	1,728.41		1,426.56		
Arkansas	171,397.98	10,469.28	7,508.76	65,318.34	46,313.81	5,783.91		5,594.34	2,307.11	2,362.21	3,413.90		2,441.27	4,334.64	
California	130,921.71	2,634.75		68,857.23	49,312.98	6,766.86									
Colorado	63,703.73	3,500.55	1,870.13	26,660.63	2,420.51	4,601.99			2,063.20	2,707.72	2,388.46		2,506.91	2,111.56	
Connecticut	59,057.58	2,500.00		4,080.00	6,404.00	8,566.58	$2,106.16			4,649.98	4,784.31		2,133.32	1,599.97	
Delaware	21,288.65	4,229.17	1,372.54	8,070.81	3,324.52	3,485.07								256.70	
Florida	77,646.71	3,800.00		32,212.78	29,333.93					3,600.00	3,600.00			3,200.00	
Georgia	249,382.01	4,500.25		120,193.81	59,561.03	8,460.00			5,025.00	5,400.00	6,600.25		9,100.00	2,750.00	
Idaho	44,541.76	5,349.47	495.55	15,239.07	7,523.33	510.00			4,875.52		3,303.18		2,623.82		
Illinois	239,624.34	26,588.97	7,355.52	79,404.73	37,328.73	14,393.90	3,405.98		5,898.79	3,731.35	7,876.24	$2,229.85	9,724.07	3,782.82	$3,360.45
Indiana	169,833.14	10,280.29	1,260.45	50,447.58	4,545.27	17,990.39		3,766.70	13,115.60	9,616.59	13,335.99		9,436.94	6,066.69	
Iowa	178,775.89	5,400.00		67,499.89	12,348.00	5,800.00			7,200.00	5,200.00	14,400.00	1,800.00	9,000.00	7,200.00	
Kansas	137,122.84	12,083.86	1,726.07	67,088.76	26,602.07	7,795.17		1,965.98			51.10	21.99	175.65	5,290.71	
Kentucky	206,883.86	8,352.87	6,811.36	124,636.86	19,225.54	10,967.47		2,787.19	2,965.46	3,016.97	2,319.25	1,177.17	2,699.98	2,691.28	
Louisiana	139,226.59	9,738.18	188.52	73,081.23	41,556.29	7,149.12			600.00	1,253.25	850.00		600.00	460.00	
Maine	61,724.50	4,919.83	1,299.10	29,329.24	21,243.70										
Maryland	74,068.49	4,605.90	785.55	36,692.81	12,817.79	1,501.54			1,455.59	1,118.40	2,331.90		1,638.09	1,282.78	
Massachusetts	32,316.26	235.51		6,962.41	1,400.10	5,984.51			1,739.10	1,800.10			1,815.60	1,874.10	206.00
Michigan	167,549.32			120,693.23	21,635.77	25,220.32									
Minnestoa	157,466.02	11,986.31		58,989.44	4,568.87	22,206.48			7,870.00	4,525.52	11,668.28	4,437.95	2,300.21	3,921.85	
Mississippi	181,201.86	12,049.68	2,557.92	64,510.12	45,225.66	3,046.16			4,348.14	7,682.75	10,182.41			1,120.93	
Missouri	210,645.26	6,759.60	7,136.55	129,358.61	18,436.86	7,744.02	1,339.94		5,674.25	3,488.50	3,818.09		7,568.93	1,063.86	
Montana	51,613.89	4,600.00	1,000.00	26,604.00	7,650.00	4,459.89				1,500.00				1,500.00	
Nebraska	108,389.25	4,700.00	120.05	48,659.52	2,070.00	6,400.00			4,326.66	5,136.67	4,716.67		5,093.33	4,880.00	
Nevada	16,862.72	10,174.39	583.66	4,604.67											
New Hampshire	28,033.64	9,484.33	121.43	6,847.00	3,180.00	1,837.54					123.33				
New Jersey	84,378.43	15,173.45	2,175.48	16,692.31	6,721.29	5,384.38				5,343.29	4,573.40		3,457.56	1,575.67	1,642.84
New Mexico	42,616.21	3,099.96		12,412.29	8,530.79				5,286.27	2,487.58	2,487.58		5,831.32		
New York	208,241.56	5,428.62	5,442.63	60,017.95	36,670.39	20,445.04	7,532.27	1,061.44	7,410.85	4,946.97	4.87		4,517.47	5,678.61	
North Carolina	238,426.37	3,400.00		97,327.75	80,508.62				5,983.33	5,900.00	11,966.67		9,600.00	3,000.00	
North Dakota	71,683.39	8,068.77	1,411.57	23,463.03	3,022.38	5,193.24			2,610.29	2,542.58	2,028.80	1,008.86	2,601.66	3,892.69	
Ohio	239,917.62	14,782.90	11,716.80	87,484.57	22,764.41	11,281.14	4,154.92		9,161.42	5,623.19	1,756.88		11,187.64	4,535.74	
Oklahoma	174,389.77	7,346.83	2,671.54	80,799.16	63,810.28	2,662.64			964.13	2,520.25	1,054.32		1,048.01	1,200.12	
Oregon	53,324.53	9,954.94	818.75	11,748.49	1,004.67	10,726.64			943.88	1,571.79	1,060.87		3,284.50	1,097.31	
Pennsylvania	353,641.38	34,342.49	729.53	213,737.72	85,021.81	8.79			1,340.03		13,430.11		.60	2,537.09	
Rhode Island	11,680.24	3,233.84	327.52	1,005.91	1,537.73	1,931.38			768.56	737.20			137.35		
South Carolina	163,451.23	15,883.23	5,875.17	41,336.33	35,115.21	8,531.69	3,230.32		5,035.78	6,804.89	7,311.41		8,494.29	3,094.31	
South Dakota	69,037.45			17,646.12	15,631.64	5,550.00			600.00	2,400.02	3,200.00	2,100.00	2,100.00	6,164.00	
Tennessee	200,653.31	8,848.53	8,548.25	92,512.50	49,081.60	4,177.61	2,174.94	1,983.39	7,540.04	4,381.26	4,581.35		2,288.10	2,336.78	

Texas	357,874.42	29,950.01	4,466.52	161,380.00	108,287.61				6,398.53	2,747.47	2,366.46		5,404.08	2,413.34	
Utah	35,816.87	4,474.63		16,308.73	3,908.56	1,393.53			2,281.75	1,194.33	399.96		1,813.29	1,299.96	
Vermont	36,770.93	5,277.48	501.56	10,143.80	5,251.74	5,570.49				1,699.75	2,189.80		1,786.06		
Virginia	190,554.95	18,498.47		101,769.09	25,863.37	8,456.47			3,647.45	3,800.00	2,101.29		3,666.38	2,954.16	
Washington	77,121.21	15,342.29	2,077.83	33,178.80	8,258.44	7,986.54			788.41	1,445.07	5.80		1,466.82	1,770.36	
West Virginia	130,873.37	10,387.27	665.47	71,323.60	19,665.16	11,418.72			3,400.00	75.00	75.00		3,000.00		
Wisconsin	163,204.06	11,030.38	8,346.98	53,285.24	6,682.40	6,368.15			5,283.32	7,913.00	12,852.32		13,165.00	5,847.50	
Wyoming	25,133.15	8,213.14		12,191.55	4,128.46	600.00									
Hawaii	27,905.20	3,231.84		14,220.00	10,088.26				365.10						
Total, 1930	6,182,936.00	431,964.15	100,683.17	2,666,396.19	1,135,297.27	305,283.73	23,944.53	21,397.22	146,467.99	137,065.96	175,879.39	12,775.82	158,434.81	108,085.53	5,209.29
1929	6,172,180.80	465,686.78	116,314.47	2,685,527.95	1,030,830.37	350,585.80	21,582.13	15,090,43	156,069.63	137,689.36	168.639.28	17,541.93	166,833.78	98,371.06	3,046.91
1928	5,880,000.00	467,466.38	91,233.78	2,652.167.00	1,021,850.25	372.020.37	35,189.04	13,273.50	135,317.99	111,494.68	150,994.24	16,335.29	139,049.89	87,358.18	
1927	5,880,000.00	474,287.82	112,201.26	2,561,832.81	1,007,869.10	364,487.44	43,474.59	28,871.39	156,911.94	121,739.30	142.608.92	15,013.11	149,780.57	87,320.54	
1926	5,880,000.00	514,714.28	143,188.39	2,543,586.90	964,378.07	358,598.55	52,729.07	33,037.96	136,255.72	106,794.63	150,440.07	14,738.70	151,594.87	100,227.86	
1925	5,879,999.99	489,334.58	129,589.83	2,545,660.14	923,732.64	395,996.33	75,683.11	25,285.69	164,480.17	115,788.09	169,368.58	13,478.82	174,800.00	78,561.76	
1924	5,880,000.00	567,299.02	107,430.35	2,499,648.20	885,351.85	347,032.94	362,896.50	25,595.61	127,715.52	115,383.23	146,225.26	15,058.10	192,313.17		
1923	5,880,000.00	560.818.85	134,982.11	2,484.671.37	885,893.81	388,141.33	321,699.57	27,557.00	135,853.68	112,673.45	149,978.94	13,828.80	178,711.34		
1922	5,580,000.00	534,939.13	107,237.37	2,585.672.90	690,124.03	367,674.18	223,457.69	24,013.74	151,306.74	104,173.38	149,102.80	15,052.24	155,850.69		
1921	5,080,000.00	510,671.70	96,897.63	2,314,067.79	643,712.65	338,121.77	163,028.85	29,275.33	117,477.14	83,263.80	151,544.79	14,183.78	124,471.96		
1920	4,580,000.00	497,185.75	113,328.01	1,980,498.67	643,380.58	319,561.57	169,269.04	35,041,37	87,871.04	67,003.77	102,469.90	12,947.38	97,415.30		
1919	2,580,000.00	497,041.99	105,120.93	655,145.98	395,631.98	143,219.87		46,439.03	93,866.43	59,589.20	85,229.65	14,524.65	101,141.49		
1918	2,080,000.00	390,545.48	76,910.28	584,815.72	356,475.39	112,076.34		44,515.12	68,268.80	40,519.09	67,341.75	14,790.71	75,316.76		
1917	1,580,000.00	249,738.80	43,881.48	453.417.17	261,229.14	105,290.22		69,425.12	59,018.49	26.507.94	49,536.76	11,807.83	56,668.96		
1916	1,080,000.00	177,213.30	27,867.77	289,708.77	174,753.22	63,189.11		63,125.80	30,305.43	21,168.07	38,365.08	9,593.93	35,352.22		
1915	480,000.00	86,278.39	8,241.16	128,083.33	69,890.05	32,944.29		33,821.65	8,640.84	5,735.83	16,269.72	3,930.67	9,191.99		

[1] Prior to 1920 included home-economics specialists.
[2] Prior to 1920 included under home demonstration work.
[3] Prior to 1925 included foods and nutrition, home management, and clothing.

TABLE 20.—*Expenditures of funds from the United States appropriation of May 8, 1914 (Federal Smith-Lever) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects, and totals for 1915–1929*—Continued

State	Clothing [4]	Home management [4]	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Rodent pests	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Information	Miscellaneous specialists	Unexpended balance
Alabama	$3,300.00	$3,300.00	$5,944.38		$3,000.00			$10,153.75			$8,320.11		$3,898.66		
Arizona															
Arkansas	880.78	2,344.83	1,650.78				$343.89				2,581.07		7,749.06		
California									$3,349.89						
Colorado	840.37	2,480.33	1,940.51						2,609.10		2,703.36		2,293.40		$5.00
Connecticut	2,800.00	3,150.00	4,383.98		1,811.00			1,625.00	3,464.00		3,332.99		1,666.29		
Delaware				$251.42	298.42										
Florida			633.33	633.34	633.33										
Georgia	2,400.00	2,700.00	8,700.00					4,691.67	2,400.00		4,200.00	$2,700.00			
Idaho	2,180.00		1,875.00		566.82										
Illinois	3,686.53	6,573.91	6,888.99					3,502.03	7,740.53	$1,395.77	966.06		3,789.12		
Indiana	2,445.27	6,059.28	7,299.26	7,704.28				2,579.04	3,883.52						
Iowa	7,400.00	14,200.00	7,200.00	1,800.00	3,600.00			1,800.00	1,200.00	1,300.00	4,428.00				
Kansas	2,500.00		1,859.57		77.11			5,765.20	1,907.30		89.12		2,123.18		
Kentucky	1,926.11		2,457.52					5,986.96	1,458.93		2,863.52		4,539.42		
Louisiana	600.00		1,200.00		1,200.00			750.00							
Maine													4,932.63		
Maryland	1,574.31		3,717.39	541.78	647.42					120.00	505.00		2,732.24		
Massachusetts	1,600.00	1,267.50	5,500.95						1,239.00		691.38				
Michigan															
Minnesota	7,264.57	3,673.34		3,336.28			360.00		6,520.00	900.00	2,516.92		420.00		
Mississippi		3,632.19	9,088.78							5,206.90	11,758.47		791.75		
Missouri	3,816.53	2,957.02	1,574.96					2,568.24	1,509.66	1,228.35	1,529.60		3,071.69		
Montana	1,500.00	1,500.00							1,300.00						
Nebraska	3,475.00	4,280.00	2,550.00		1,333.34			5,046.67	2,226.34		1,025.00		2,350.00		
Nevada													1,500.00		
New Hampshire		2,900.00							1,930.01				1,610.00		
New Jersey	336.37	1,399.45	5,920.65				1,962.97	993.51	3,592.06				7,433.75		
New Mexico			1,238.78						1,241.64						
New York	9,129.90	9,984.01	1,539.31	9,007.25	4,512.71		1,132.66	5,450.48	7,560.58	495.00			93.90		178.65
North Carolina	3,000.00		6,100.00	2,700.00	5,640.00			3,300.00							
North Dakota	6,104.02	1,834.44						1,685.62	3,456.71		831.83		1,926.90		
Ohio	5,212.69	2,170.33	8,728.95	6,969.34	12,780.37			2,607.24	8,743.76		6,605.33		1,650.00		
Oklahoma	773.88	753.94	2,191.03		1,031.30			917.79	596.62		980.66		3,067.27		
Oregon			1,888.88								5,991.66		3,232.15		
Pennsylvania	1.20		9.70	1,616.44	14.33				837.97	4.52	9.05				
Rhode Island			1,297.58												703.17
South Carolina			6,330.42		6,477.52						9,134.75		795.91		
South Dakota	2,100.00		1,050.00		1,050.00			900.00	2,212.33		6,333.34				

Tennessee	1,103.82	1,103.81	2,300.27						2,920.95		2,670.11		2,100.00		
Texas	3,208.12	7,291.98	2,822.35		2,643.73			2,868.79		7,630.07			7,995.36		
Utah	1,709.00	1,033.13													
Vermont		2,198.67							1,901.58				250.00		
Virginia	200.00		2,039.37	3,133.69				4,131.95	1,061.06	3,950.07	2,122.13		3,160.00		
Washington		1,429.95	1,206.77						251.87		1,033.99		878.27		
West Virginia			3,200.00				50.00			6,213.15			1,400.00		
Wisconsin	7,905.00	5,565.00	7,900.00	5,400.00			750.00	1,709.77			2,200.00		1,000.00		
Wyoming															
Hawaii															
Total, 1930	90,973.47	95,783.11	130,229.46	43,093.82	47,317.40		4,599.52	69,033.71	77,115.41	28,443.83	85,423.45	2,700.00	78,450.95		886.82
1929	111,806.02	84,572.45	129,339.42	41,694.31	34,560.97	$71.73	4,826.69	60,597.74	78,264.07	15,242.78	76,300.88	4,941.28	83,749.26		12,403.32
1928	95,965.00	55,785.95	92,417.32	38,474.93	25,381.16	3.89	3,804.14	39,587.70	72,516.80	11,747.46	67,601.03	8,751.05	73,007.99		1,204.99
1927	110,290.84	61,630.23	105,266.57	39,634.31	32,495.76		4,472.60	42,761.71	67,584.98	10,864.70	75,217.67	13,861.99	47,164.38	$792.21	1,563.26
1926	114,818.52	43,650.54	109,260.26	48,146.55	30,840.72		1,230.03	48,034.13	71,573.86	10,918.77	76,060.11	14,347.13	17,736.55	516.66	22,581.10
1925	98,595.84	34,351.92	114,473.14	46,623.74	27,010.41	1,737.91	7,053.51	51,688.86	82,053.25	14,044.63	75,929.93	8,437.00	15,324.01		916.10
1924			105,347.12	54,154.16	49,340.16	2,711.31	9,184.80	59,303.95	59,855.15	24,304.54	91,555.31	5,677.10	6,221.66		20,394.99
1923			113,766.16	54,351.72	30,060.01	2,244.63	4,526.43	54,910.50	63,497.82	13,395.83	86,237.42	2,670.14		345.98	59,183.11
1922			119,494.94	42,662.39	27,482.48	600.00	409.84	57,612.13	65,492.11	4,552.23	70,812.25	1,647.17		10,979.02	69,650.55
1921			120,881.01	39,347.39	31,290.85	550.00	1,183.59	75,761.33	45,856.28	7,313.30	61,357.69	499.98		3,289.89	105,951.50
1920			94,734.69	38,021.20	23,249.32		2,248.18	58,678.38	45,260.73	8,660.11	61,803.38	1,723.91		3,992.08	115,655.64
1919			89,593.31	40,819.23	21,307.37	388.18	2,089.12	50,945.46	48,087.69	20,794.66	57,132.80	1,943.32		8,775.70	41,171.96
1918			73,870.57	24,800.53	7,659.64	864.25	1,201.41	24,119.45	34,733.81	15,744.60	33,629.68	2,680.84		17,186.07	11,933.71
1917			45,773.14	11,691.68	7,957.23		4,591.58	21,730.76	32,786.96	10,510.03	18,374.98	2,455.40		32,660.70	4,945.63
1916			42,949.87	6,801.49	4,603.57		358.45	15,680.02	34,004.56	3,197.59	7,204.80	748.84		31,731.84	2,076.27
1915			16,309.53	400.00	440.00			1,180.15	4,369.31	126.00	2,298.60	3,712.95		43,070.27	5,065.27

[1] Prior to 1925 included under home economics.

TABLE 21.—*Expenditures from the United States appropriation of May 8, 1914 (State Smith-Lever) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects, and totals for 1916–1929*

State	Total	Administration	Printing and distribution of publications	County agent work	Home demonstration work [1]	Boys' and girls' club work	Home-economics specialists [2 3]	Extension schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy	Foods and nutrition [4]	Child care and training
Alabama	$203,041.91	$9,834.28	$7,389.65	$91,329.30	$72,785.48	$1,374.73		$13.55	$736.61	$736.61	$736.61		$1,757.75	$1,430.42	
Arizona	23,920.44	6,583.68	206.52	4,087.56	5,870.67	1,284.17			2,747.17	1,119.68	533.00		1,482.99		
Arkansas	161,397.98	7,753.25		85,550.02	52,756.67			116.10	1,995.00	1,350.00	1,650.00		2,113.59	2,670.00	
California	120,921.71			105,022.07		15,899.64									
Colorado	53,703.73	4,250.00	965.09	27,276.05	2,163.56	3,387.24			1,600.00	1,600.00	1,740.00		1,600.00	1,400.00	
Connecticut	49,057.58	8,236.27	3,091.44		1,188.93	5,287.32	$1,307.83		680.90	5,519.80	7,291.06		1,898.53	1,542.11	
Delaware	11,288.65	5,070.43		2,803.34	1,575.83	1,580.48								113.10	
Florida	67,646.71	3,282.30	5,209.19	34,287.05	15,041.44	1,901.27		146.58		1,315.47	1,525.83			1,012.15	
Georgia	239,382.01	13,070.64	4,553.53	82,401.30	67,873.69	7,524.51			5,375.81	5,203.75	3,084.39	$2,269.72	9,832.89	970.73	$42.47
Idaho	34,541.76	2,331.85	300.00	15,681.52	5,918.33	425.00			3,670.06				1,600.00		
Illinois	229,624.34			225,620.96	4,003.38										
Indiana	159,833.14			159,833.14											
Iowa	168,775.89			168,775.89											
Kansas	127,122.84	1,077.13	702.50	39,780.81	4,899.65	3,244.19	3,433.18	781.57	8,876.01	8,199.37	9,117.96	3,605.76	12,751.92	1,807.11	
Kentucky	196,883.86	11,679.99	810.00	70,962.89	24,656.17	21,151.24		5,020.00	11,559.98	8,653.32	4,125.27	3,100.00	10,093.34	5,600.00	
Louisiana	129,226.59	17,860.82	2,688.94	42,768.41	10,634.34	4,166.36			3,274.40	8,029.34	4,137.02		3,444.27	2,523.09	
Maine	51,724.50	5,106.50		12,782.75	1,572.71	6,589.28				3,572.22	3,815.86		2,227.73	3,121.09	
Maryland	64,068.49	6,598.69	1,396.42	23,966.30	6,813.34	3,163.10			3,065.29	3,072.68	3,154.30		3,363.76	1,635.05	
Massachusetts	22,316.26			22,316.26											
Michigan	157,549.32	10,420.00		2,523.00	186.67	8,568.25			7,971.42	11,973.30	14,186.55		31,944.10	5,853.30	
Minnesota	147,466.02	1,100.00		116,400.51	5,875.00	6,888.00			1,607.97	212.68	5,077.90		2,298.22		
Mississippi	171,201.86	10,863.63		95,629.55	45,559.91	13,418.29									
Missouri	200,645.26	5,823.53	6,193.91	88,871.90	12,683.07	12,510.49	3,147.44	741.31	8,998.42	6,391.97	6,437.55		12,243.75	2,746.77	
Montana	41,613.89	5,400.00		19,849.40	2,000.00	1,690.11				1,600.00				2,100.00	
Nebraska	98,389.25	11,306.06	1,464.70	34,323.78	5,374.46	9,899.32			3,193.37	2,499.17	3,009.48		3,824.48	1,566.42	
Nevada	6,862.72			3,019.27	825.40					1,048.05	1,970.00				
New Hampshire	18,033.64			12,000.00	6,033.64										
New Jersey	74,378.43			22,583.32	11,829.98	13,333.38				7,322.76	4,655.65		2,160.00		1,800.00
New Mexico	32,616.21	9,387.52	2,099.87	14,781.01	1,970.37										
New York	198,241.56			97,673.10	72,102.23	6,415.39	3,500.00	1,522.19	3,600.00					3,500.00	
North Carolina	228,426.37	14,007.36	6,449.93	129,667.37	42,573.50	3,630.88			2,163.13	2,051.71	4,326.25		3,800.18	612.51	
North Dakota	61,683.39	6,685.51	336.29	24,674.97	2,379.98	3,024.58			1,496.68	1,316.25	1,800.00	2,730.00	1,800.00	2,925.00	
Ohio	229,917.62	1,741.67		127,303.20	13,300.00	20,372.05			8,000.00		3,800.00		12,033.33	5,416.67	
Oklahoma	164,389.77	20,574.54		75,024.25	16,180.00	8,058.96			3,950.00	6,100.00	4,347.78		3,200.00	2,900.00	
Oregon	43,324.53	5,087.63		15,261.87	550.00	5,081.43			2,333.33	180.02	1,800.00			1,666.67	
Pennsylvania	343,641.38	14,291.50	420.34	89,196.16	26,515.54	24,791.83			17,342.03	19,257.43	20,427.73		20,523.76	1,155.45	
Rhode Island	1,680.24	354.93	.87	394.37	74.92	35.80			8.61	92.92			.44		
South Carolina	153,451.23	9,025.03		84,018.76	39,358.76				3,687.52	1,900.01			4,737.53		
South Dakota	59,037.45	12,604.65	5,227.82	5,978.71	2,547.64	12,067.29			160.00	1,199.28	1,601.23	1,506.81	1,726.01	2,633.16	
Tennessee	190,653.31	17,062.84	2,292.28	113,023.51	26,931.24	3,371.63	1,113.50	1,129.33	7,817.56	2,381.03	3,568.60		1,627.87	1,075.60	

Texas	347,874.42		910.84	215,092.19	100,120.37				5,448.51	2,833.34	2,833.33		333.33	1,200.00	
Utah	25,816.87	3,752.88		15,589.40	3,174.59									1,100.04	
Vermont	26,770.93	3,204.34		8,886.61	4,034.58	4,153.70				1,120.53	2,661.71		1,184.85		
Virginia	180,554.95	276.84	9,919.51	62,516.00	50,110.67	153.80			5,895.94	9,258.43	12,261.45		3,371.79	1,815.60	
Washington	67,121.21	469.46	1,922.50	41,022.36	3,776.13	2,404.86			1,870.74	3,295.78			2,959.79	1,693.63	
West Virginia	120,873.37			69,648.05	25,011.56	17,109.94			907.02	3,400.00	1,751.97		774.79		
Wisconsin	153,204.06	4,888.97	1,359.71	85,168.80	4,749.32	3,094.34		2,575.18	1,998.64	2,114.44	4,975.31		7,834.03	2,108.27	
Wyoming	15,133.15	133.14		13,800.01		1,200.00									
Hawaii	17,905.20	7,039.18	1,600.00	1,059.84	3,170.18				4,436.00						
Total, 1930	5,692,936.00	278,237.04	67,511.85	2,900,226.89	806,753.90	258,252.85	12,501.95	12,045.81	136,468.12	135,921.34	142,408.79	13,212.29	170,545.02	65,893.94	1,842.47
1929	5,682,180.80	300,878.57	66,538.82	2,896,354.18	866,956.17	233,896.16	21,546.70	13,341.86	122,051.67	131,251.46	144,157.74	9,126.79	150,995.94	74,247.84	
1928	5,400,000.00	248,360.35	66,577.46	2,710,846.14	820,664.88	228,767.19	38,779.42	13,225.01	171,861.95	128,812.75	122,290.63	13,359.11	175,939.93	72,137.57	
1927	5,400,000.00	240,064.19	98,681.84	2,876,107.68	728,071.31	207,667.79	36,352.87	12,261.55	150,433.55	127,443.57	113,868.01	9,806.86	152,758.64	70,503.52	
1926	5,400,000.00	238,648.04	104,493.36	2,861,288.71	759,181.86	222,413.89	46,202.49	15,664.10	145,205.90	129,600.34	118,739.28	6,408.24	162,469.95	69,537.29	
1925	5,399,999.99	260,230.20	80,633,60	2,871,202.68	764,356.32	180,045.94	114,996.88	15,716.27	150,132.86	109,889.36	110,540.95	13,609.97	132,991.43	60,993.43	
1924	5,400,000.00	285,911.89	81,005.72	2,962,393.16	750,939.18	194,681.32	165,523.64	13,984.83	176,842.99	103,904.31	133,617.88	13,628.91	117,546.29		
1923	5,400,000.00	332,631.65	74,414.38	2,940,071.60	831,627.67	193,467.20	104,525.11	5,506.33	150,062.17	100,913.09	115,412.01	10,546.32	115,216.02		
1922	5,100,000.00	299,388.81	78,678.18	2,669,702.27	775,682.83	228,517.62	200,301.69	16,517.56	117,689.62	89,407.18	88,359.26	10,248.45	128,143.57		
1921	4,600,000.00	299,526.68	76,823.58	2,348,738.60	761,014.77	215,447.91	94,802.54	22,731.78	104,050.07	77,498.14	74,905.25	15,728.27	100,675.72		
1920	4,100,000.00	247,554.18	58,956.38	2,204,209.25	589,724.44	178,287.12	117,032.75	47,019.29	84,244.58	61,520.81	50,416.25	14,135.15	70,309.47		
1919	2,100,000.00	252,329.45	55,540.79	941,902.93	293,869.64	112,706.28		28,667.68	55,747.75	34,779.81	48,483.73	11,498.94	42,585.94		
1918	1,600,000.00	178,212.44	40,130.89	766,416.54	197,262.21	80,315.51		35,850.11	44,274.89	22,973.75	45,155.37	8,054.15	44,613.67		
1917	1,100,000.00	97,302.53	34,819.50	541,495.05	126,235.78	50,209.68		36,501.94	27,199.22	12,722.78	24,306.88	5,230.27	26,433.67		
1916	600,000.00	90,055.50	15,198.34	283,077.42	68,468.44	28,473.54		25,754.65	7,305.47	7,102.61	9,905.43	2,406.88	9,439.85		

[1] Prior to 1920 included home-economics specialists.
[2] Prior to 1920 included under home demonstration work.
[3] Prior to 1925 included foods and nutrition, home management, and clothing.
[4] Prior to 1925 included under home economics.

TABLE 21.—*Expenditures from the United States appropriation of May 8, 1914 (State Smith-Lever) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects, and totals for 1916–1929*—Continued

State	Clothing	Home management	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Rodent pests	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Information	Miscellaneous specialists	Unexpended balance
Alabama	$1,268.81	$1,126.75	$2,886.53		$1,073.49			$1,825.13			$4,872.10		$1,864.11		
Arizona															
Arkansas	705.00	1,100.00	1,349.23								1,862.00		427.12		
California															
Colorado	1,500.00	900.00	900.00						$2,113.52		308.33		1,994.94		$5.00
Connecticut	1,419.09	1,216.43	4,741.59		548.71		$152.85	946.69	1,689.30		2,298.73				
Delaware				$14.06	131.41										
Florida			325.72	325.73	325.72								2,948.26		
Georgia	1,569.51	762.26	6,411.83				3,169.42	5,170.41	1,164.07		4,737.19	$422.51	13,771.38		
Idaho	1,955.00		1,580.00		1,080.00										
Illinois															
Indiana															
Iowa															
Kansas	5,935.32	3,291.41	4,324.17	3,714.29	4,925.27	$181.14		2,206.81	832.79		3,434.48				
Kentucky	5,400.00		7,100.00						3,405.00		3,566.66				
Louisiana	3,540.02		6,307.26		5,083.25			2,475.60		$3,578.32	2,834.36		5,880.79		
Maine	3,318.45		2,227.72				3,211.01		4,179.18						
Maryland	1,587.81		3,518.28	207.69	23.23					1,000.00			1,502.55		
Massachusetts															
Michigan	5,086.34	7,699.07	17,963.28		1,241.60			10,259.88	666.64		11,056.00		9,949.92		
Minnesota				600.00			280.71		1,602.65				5,522.38		
Mississippi								5,281.65					448.83		
Missouri	6,206.95	3,728.12	2,855.11					4,218.50	3,544.99	3,987.75	3,294.07		6,019.66		
Montana	2,100.00	1,254.38							1,700.00				3,920.00		
Nebraska	1,880.31	2,483.30	1,661.39		467.67			6,018.13	3,209.16		465.14		5,742.91		
Nevada															
New Hampshire															
New Jersey			8,640.00					1,333.34	720.00						
New Mexico													4,377.44		
New York				4,000.00				2,500.00	3,250.00						178.65
North Carolina	653.59	599.52	2,351.50	974.01	2,734.45		1,124.41	2,266.32					8,439.75		
North Dakota	3,743.76	1,761.67						1,714.18	3,530.00		250.00		1,514.52		
Ohio	5,900.00	6,001.61	11,400.00					3,400.00	3,849.09				7,400.00		
Oklahoma	2,827.80		5,950.00		2,700.00			3,200.00	2,322.21		2,566.67		4,487.56		
Oregon			2,278.58								4,660.00		4,425.00		
Pennsylvania	18,615.31		21,092.30	11,432.21	20,573.27		7,875.11		10,279.02	5,284.13	10,568.26		4,000.00		
Rhode Island			14.21												703.17
South Carolina											4,341.66		6,381.96		
South Dakota	1,211.63		689.27		689.26			903.00	1,784.10		3,028.81		3,478.78		
Tennessee	387.03	387.02	1,709.95						3,283.45		1,390.87		2,100.00		

Texas	1,400.00	1,400.00	3,000 00		2,791.38			2,792.43		1,700.00			6,018.70		
Utah	999.96	1,200 00													
Vermont		1,497.51	11.50						15.60						
Virginia	540 00	182 18	8,614.89	1,208 33			854.83	4,704.55	2,436.01	1,562.10	4,872.03				
Washington		2,741.64	1,985.01						1,400.83		231.17		1,347.31		
West Virginia			1,770.04				500.00								
Wisconsin	2,617.84	1,774.54	2,822 12	1,880 49			3,485.03	2,871.36	4,575.11		7,960.56		4,350 00		
Wyoming															
Hawaii							600 00								
Total 1930	82,369.53	41,107.41	136,481.48	24,356.81	44,388.71	181.14	21,253.37	64,087.98	61,552.72	17,112.30	78,599.09	422.51	118,313 87		886.82
1929	59,241.35	47,665.12	133,436.31	28,446.72	48,374.74	1,414.53	15,662 85	71,945.83	49,865.75	18,640.52	86,799.37	1,013 54	75,926.95		12,403.32
1928	61,956.69	31,747.16	139,633.23	34,569.74	54,058 74	1,532.97	13,355.79	57,508.69	44,001.01	21,130.44	67,287.87	2,445.83	57,944.46		1,204.99
1927	56,960.18	32,742 74	131,216.19	30,517.12	56,093 85	1,430 72	8,712 94	63,863.19	45,836.50	35,034.65	53,278.56	2,653.21	56,075.51		1,563.26
1926	55,075 63	25,130 61	129,784.39	37,415.83	52,583 16	1,469.20	11,624 24	64,390 07	35,904.72	28,647.75	48,523.70	1,696.09	27,084.29		816.90
1925	67,048 09	25,993.85	132,523 13	39,278.00	48,187.89	675.00	15,059.40	58,605.76	38,129.86	25,077.49	57,812.86	1,381.76	21,721.85	$2,249.00	916.10
1924			145,418.75	24,372.62	34,971.48	1,444 28	3,341.97	57,456.05	42,429.13	6,831.87	54,499.08	1,913.03	6,793.01	153.62	20,394.99
1923			127,599.02	16,280.70	43,239.84	2,220 00	2,595.41	65,911.42	39,344.76	6,270.69	59,186.20	3,768.04		7.2[illegible]	59,183.11
1922			99,493 33	23,688.88	32,150 09	1,627.05	6,857.40	42,101.04	31,293.57	5,296.99	69,367.15	5,758.05		10,078.79	69,650.55
1921			82,432.04	38,993 32	22,121.07	11,119.99	50.00	5,870 22	31,388.27	35,981.24	10,142.62	56,663.33		7,343.09	105,951.50
1920			76,121.70	29,513.14	21,011 90	9,380.74	1,927.09	5,555.87	42,707.86	25,288.52	12,718.94	32,737.92		3,971.01	115,655 64
1919			37,705.66	19,646.78	10,750.04	10,134.00	1,163.59	3,759.50	26,472.85	21,327.94	13,077.73	31,572.65		5,104.36	41,171.96
1918			22,294.37	19,659.97	9,904 89		367.54	1,184.10	20,830.86	13,135.06	13,798.22	20,502.90		3,128.85	11,933.71
1917			18,183.43	18,643.05	7,030 07	12,489.65		3,171.32	12,420.99	15,638.37	12,636.50	9,544.02		2,839.67	4,945.63
1916			9,911.70	5,388.86	3,560 81	3,742.83		1,498.89	3,003.55	6,065.04	12,279.09	1,850.19		3,434.64	2,076.27

TABLE 22.—*Expenditures from the United States appropriation authorized May 22, 1928 (Federal Capper-Ketcham), for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects, and total for 1929*

State	Total	Administration	Printing and distribution of publications	County agent work	Home demonstration work	Boys' and girls' club work	Extension schools	Animal husbandry	Poultry	Dairying	Agronomy	Foods and nutrition
Alabama	$37,832.79		$593.07	$17,659.18	$16,140.24	$3,440.30						
Arizona	22,100.88	$161.09		8,801.65	10,390.38	1,570.08		$134.63	$10.72		$1,032.33	
Arkansas	34,175.28		11.73	18,934.84	15,226.28		$2.43					
California	30,620.32			14,483.01	16,137.31							
Colorado	24,716.70	278.84	46.50	11,177.94	12,862.64							
Connecticut	24,308.64			3,749.81	10,216.00	9,987.02						
Delaware	20,991.46	114.33		3,000.00	7,641.50	6,500.00						$3,375.29
Florida	25,941.28			9,863.31	12,785.15	3,292.82						
Georgia	41,024.48			23,021.66	11,922.22							2,256.69
Idaho	23,033.74			11,358.56	8,164.23	3,469.90				$40.95		
Illinois	40,167.48	98.92			10,959.89	29,108.67						
Indiana	34,037.85			4.81	16,273.43	17,418.58				1.01	340.02	
Iowa	34,823.28			6,000.28	18,643.27	10,179.73						
Kansas	31,164.96			12,949.78	13,698.99	4,516.19						
Kentucky	37,291.95			22,752.76	14,539.19							
Louisiana	31,349.73	657.58	6.67	20,105.79	10,027.35	86.63			24.99	10.25	9.50	26.11
Maine	24,542.86				7,364.29	17,178.57						
Maryland	25,627.02			15,664.26	9,940.71	22.05						
Massachusetts	21,960.00			1,600.00	1,600.00	15,832.00						
Michigan	33,837.26			18,877.34	5,400.00	4,800.00						
Minnesota	32,951.66				14,240.55	14,964.30			336.91	269.02	269.55	
Mississippi	35,036.35			14,276.36	15,300.59							
Missouri	37,622.30			13,555.53	20,816.22	500.00		116.72	565.00	868.00	727.65	35.77
Montana	23,654.87		312.25	11,851.81	7,079.10							
Nebraska	28,641.35			6,924.20	17,504.65	4,212.50						
Nevada	20,602.75			7,560.00	13,042.75							
New Hampshire	21,583.90		61.06	7,975.00	1,958.33	8,664.48						625.03
New Jersey	26,532.51			569.00	9,535.15	12,603.36						
New Mexico	22,864.62			5,821.66	17,042.96							
New York	37,411.20			12,410.90	10,543.63	12,714.88						
North Carolina	40,062.27			19,483.93	16,578.34							
North Dakota	25,417.54			13,885.98	11,531.56							
Ohio	40,193.24	116.55	1,868.95	15,789.60	13,775.88	7,351.61						
Oklahoma	34,438.05	4.29		14,289.99	17,293.89	433.33						
Oregon	23,805.11	2,500.00		6,719.83	12,116.94	200.00		875.00		1,386.02		
Pennsylvania	50,181.39			7,250.00	21,786.12					4,200.00		
Rhode Island	20,147.57	264.20		5,208.77	5,695.57	6,428.35			186.69			
South Carolina	33,477.33			17,100.17	16,377.16							
South Dakota	25,185.15				12,304.15	12,881.00						
Tennessee	36,744.72			18,635.40	18,109.32							

Texas	50,553.17			28,465.96	22,087.21							
Utah	22,267.45	3,146.92	483.79	11,602.39	6,799.92	234.43						
Vermont	22,351.25	154.94		1,756.65	9,089.95	10,649.71			450.00			
Virginia	35,857.81	1,039.82		17,587.66	14,514.99							
Washington	25,895.13	541.43			13,463.01	7,059.54						
West Virginia	30,616.08	4.44		4,327.82	20,573.97	5,709.85						
Wisconsin	33,455.63			9,625.05	3,490.30	20,340.28						
Wyoming	21,329.11			8,499.11	11,330.00							
Hawaii	21,572.53		654.88	8,687.12	11,252.80							
Total, 1930	1,480,000.00	9,083.35	4,038.90	509,864.87	615,168.08	252,350.16	2.43	1,126.35	1,574.31	6,775.25	2,379.05	6,318.89
1929	980,000.00	14,511.11	4,586.37	321,426.80	356,584.91	157,373.27		2,778.35	1,830.94	2,724.77	2,241.89	4,427.86

TABLE 22.—*Expenditures from the United States appropriation authorized May 22, 1928 (Federal Capper-Ketcham), for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects, and total for 1929*—Continued

State	Child care and training	Clothing	Home management	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Farm forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Information	Unexpended balance
Alabama													
Arizona													
Arkansas													
California													
Colorado												$350.78	
Connecticut											$355.81		
Delaware						$360.34							
Florida													
Georgia	$3,823.91												
Idaho													$0.10
Illinois													
Indiana													
Iowa													
Kansas													
Kentucky													
Louisiana		$22.10		$27.57		50.14		$169.31			65.38		60.36
Maine													
Maryland													
Massachusetts	1,464.00										1,464.00		
Michigan	2,760.00		$1,999.92										
Minnesota					$347.54					$2,400.00		38.74	85.05
Mississippi			3,508.23									1,951.17	
Missouri		40.58	5.66							85.00		306.17	
Montana									$3,960.15				451.56
Nebraska													
Nevada													
New Hampshire		2,300.00											
New Jersey	1,500.00											2,325.00	
New Mexico													
New York		200.00	1,500.00										41.79
North Carolina			3,000.00								1,000.00		
North Dakota													
Ohio													1,290.65
Oklahoma			2,416.55										
Oregon													7.32
Pennsylvania				3,400.00	2,275.00								11,270.27
Rhode Island				60.00									2,303.99
South Carolina													
South Dakota													
Tennessee													

Texas													
Utah													
Vermont									250.00				
Virginia		2,200.00		515.34									
Washington													4,831.15
West Virginia													
Wisconsin													
Wyoming				1,500.00									
Hawaii													977.73
Total, 1930	9,547.91	4,762.68	12,430.36	5,502.91	2,622.54	410.48		169.31	4,210.15	2,485.00	2,885.19	4,971.86	21,319.97
1929	1,600.00	2,105.51	5,428.04	340.21		90.30	$1,050.00	177.03	3,105.45	6.00	4,596.84	4,032.00	88,982.35

TABLE 23.—*Expenditures from the United States appropriation (State Capper-Ketcham) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects*

State	Total	Administration	Printing and distribution of publications	County agent work	Home demonstration work	Boys' and girls' club work	Home-economics specialists	Animal husbandry	Poultry	Dairying	Animal diseases
Alabama	$17,832.79			$11,596.39	$6,236.40						
Arizona	2,100.88	$35.10		2,046.61	19.17						
Arkansas	14,175.28			6,049.31	8,125.97						
California	10,620.32				10,620.32						
Colorado	4,716.70	258.34		2,116.66	2,341.70						
Connecticut	4,308.64		$121.10			$300.89	$143.84		$1,272.55	$270.40	
Delaware	991.46								991.46		
Florida	5,941.28			5,941.28							
Georgia	21,024.48			11,024.48	10,000.00						
Idaho	3,033.74	255.33	461.57	1,006.67	1,310.07						
Illinois	20,167.48				20,167.48						
Indiana	14,037.85			14,037.85							
Iowa	14,823.28			7,137.74	7,685.54						
Kansas	11,164.96			11,164.96							
Kentucky	17,291.95			17,291.95							
Louisiana	11,349.73				11,289.37						
Maine	4,542.86					1,379.29					
Maryland	5,627.02				5,627.02						
Massachusetts	1,960.00			1,960.00							
Michigan	13,837.26			1,986.45		11,850.81					
Minnesota	12,961.66	194.11		12,151.01					158.99		$68.75
Mississippi	15,036.35			15,036.35							
Missouri	17,622.30			17,622.30							
Montana	3,654.87			3,203.31							
Nebraska	8,641.35	1,064.08		1,744.75	1,703.79	627.84		$1,980.63	56.45	209.55	
Nevada	620.75				602.75						
New Hampshire	1,583.90				1,583.90						
New Jersey	6,532.51					95.00					
New Mexico	2,864.62			2,047.09	817.53						
New York	17,411.20			3,600.00		13,769.41					
North Carolina	20,062.27			20,062.27							
North Dakota	4,517.54							466.66	225.00	300.00	600.00
Ohio	20,193.24			9,481.76	9,420.83						
Oklahoma	14,438.05			7,997.77	1,291.13	1,780.75			400.00	611.08	
Oregon	3,805.11	761.02				1,500.00			1,200.00		
Pennsylvania	30,181.39			18,911.12							
Rhode Island	147.57										
South Carolina	13,477.33			7,477.33	6,000.00						
South Dakota	5,185.15				381.96						1,593.53
Tennessee	16,744.72				16,744.72						

Texas	30,553.17			17,253.17	13,300.00						
Utah	2,267.45			2,267.45							
Vermont	2,351.25	539.54		53.42	474.84	1,160.03					
Virginia	15,857.81	154.56	2,629.93	2,612.32						3,753.87	
Washington	5,895.13				694.92	369.06					
West Virginia	10,616.08	2.88		1,110.83	496.20	9,006.17					
Wisconsin	13,455.63			5,166.24	1,414.72	6,874.67					
Wyoming	1,329.11			1,062.58	266.53						
Hawaii	1,572.53				594.80						
Total, 1930	500,000.00	3,264.96	3,212.60	242,221.42	139,211.66	48,713.92	143.84	2,447.29	4,304.45	5,144.90	2,262.28

TABLE 23.—*Expenditures from the United States appropriation (State Capper-Ketcham) for cooperative agricultural extension work in each State and Hawaii for the year ended June 30, 1930, by projects*—Continued

State	Agronomy	Foods and nutrition	Clothing	Home management	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Agricultural engineering	Farm management	Marketing	Information	Unexpended balance
Alabama												
Arizona												
Arkansas												
California												
Colorado												
Connecticut	$1,404.48		$179.40	$233.90					$179.55	$202.53		
Delaware												
Florida												
Georgia												
Idaho												$0.10
Illinois												
Indiana												
Iowa												
Kansas												
Kentucky												
Louisiana												60.36
Maine				3,163.57								
Maryland												
Massachusetts												
Michigan												
Minnesota	68.75					$125.00					$100.00	85.05
Mississippi												
Missouri												
Montana												451.56
Nebraska	278.43				$35.99		$81.05	$389.31	220.17		249.31	
Nevada												
New Hampshire												
New Jersey		$2,900.00		3,537.51								
New Mexico												
New York												41.79
North Carolina												
North Dakota	516.67		1,775.87							500.00	1,033.34	
Ohio												1,290.65
Oklahoma								2,357.32				
Oregon										336.77		7.32
Pennsylvania												11,270.27
Rhode Island												147.57
South Carolina												
South Dakota	1,592.41				1,189.09		428.16					
Tennessee												
Texas												

Utah												
Vermont				70.00					53.42			
Virginia			907.86	2,310.20	3,489.07							
Washington												4,831.15
West Virginia												
Wisconsin												
Wyoming												
Hawaii												977.73
Total, 1930	3,860.74	2,900.00	2,863.13	9,315.18	4,714.15	125.00	509.21	2,746.63	453.14	1,039.30	1,382.65	19,163.55

TABLE 24.—*Sources of offset to Federal Smith-Lever and Capper-Ketcham funds for the fiscal year ended June 30, 1930, and totals for 1916–1929*

State	Total	State and college	County	Farmers' organizations, etc.	Unexpended balance
Alabama	$220,874.70	$175,861.24	$45,013.46		
Arizona	26,021.32	26,021.32			
Arkansas	175,573.26	120,546.95	55,026.31		
California	131,542.03	131,542.03			
Colorado	58,420.43	43,510.66	14,904.77		$5.00
Connecticut	53,366.22	53,366.22			
Delaware	12,280.11	12,280.11			
Florida	73,587.99	48,872.25	24,715.74		
Georgia	260,406.49	151,180.45	109,226.04		
Idaho	37,575.50	37,575.40			.10
Illinois	249,791.82	136,253.12		$113,538.70	
Indiana	173,870.99	83,405.49	90,465.50		
Iowa	183,599.17		183,599.17		
Kansas	138,287.80	91,841.56	46,446.24		
Kentucky	214,175.81	142,241.30	71,934.51		
Louisiana	140,576.32	95,850.36	44,665.60		60.36
Maine	56,267.36	56,267.36			
Maryland	69,695.51	69,695.51			
Massachusetts	24,276.26		24,276.26		
Michigan	171,386.58	166,877.13	4,509.45		
Minnesota	160,417.68	107,552.95	52,779.68		85.05
Mississippi	186,238.21	98,149.83	88,088.38		
Missouri	218,267.56	119,319.70	98,947.86		
Montana	45,268.76	24,599.47	20,217.73		451.56
Nebraska	107,030.60	80,226.10	26,804.50		
Nevada	7,465.47	7,465.47			
New Hampshire	19,617.54	19,617.54			
New Jersey	80,910.94	80,910.94			
New Mexico	35,480.83	32,616.21	2,864.62		
New York	215,652.76	106,530.38	108,901.94		220.44
North Carolina	248,488.64	158,582.86	89,905.78		
North Dakota	67,100.93	47,786.90	19,314.03		
Ohio	250,110.86	185,009.58	63,810.63		1,290.65
Oklahoma	178,827.82	133,203.57	45,624.25		
Oregon	47,129.64	47,122.32			7.32
Pennsylvania	373,822.77	276,541.42	86,011.08		11,270.27
Rhode Island	1,827.81	977.07			850.74
South Carolina	166,928.56	98,843.80	68,084.76		
South Dakota	64,222.60	64,222.60			
Tennessee	207,398.03	207,398.03			
Texas	378,427.59	254,245.36	124,182.23		
Utah	28,084.32	28,084.32			
Vermont	29,122.18	29,122.18			
Virginia	196,412.76	193,903.17	2,509.59		
Washington	73,016.34	28,593.82	39,591.37		4,831.15
West Virginia	131,489.45	20,901.82	110,587.63		
Wisconsin	166,659.69	128,138.71	38,520.98		
Wyoming	16,462.26	16,462.26			
Hawaii	19,477.73	18,500.00			977.73
Total, 1930	6,192,936.00	4,257,816.84	1,801,530.09	113,538.70	20,050.37
1929	5,692,936.00	3,846,324.87	1,704,904.94	118,547.67	23,158.52
1928	5,400,000.00	3,739,918.23	1,541,568.37	117,308.41	1,204.99
1927	5,400,000.00	3,718,271.77	1,572,968.24	107,196.73	1,563.26
1926	5,400,000.00	3,620,775.64	1,670,811.48	107,595.98	816.90
1925	5,399,999.99	3,657,975.00	1,634,787.09	106,321.80	916.10
1924	5,400,000.00	3,542,542.33	1,729,371.54	107,691.14	20,394.99
1923	5,400,000.00	3,463,045.41	1,769,973.22	107,798.26	59,183.11
1922	5,100,000.00	3,218,002.63	1,712,675.09	99,671.73	69,650.55
1921	4,600,000.00	2,966,461.61	1,518,778.45	8,808.44	105,951.50
1920	4,100,000.00	2,630,754.55	1,095,923.84	257,665.97	115,655.64
1919	2,100,000.00	1,586,066.42	316,367.59	156,394.03	41,171.96
1918	1,600,000.00	1,313,330.47	215,077.20	59,658.62	11,933.71
1917	1,100,000.00	952,114.31	94,556.74	48,383.33	4,945.62
1916	600,000.00	497,484.18	69,226.79	31,212.76	2,076.27

TABLE 25.—*Expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by sources of funds, and totals for 1915–1929*

State	Grand total	Total Federal funds	Total within the State	Funds from Federal sources					Funds from within State		
				U. S. Department of Agriculture		Federal Clarke-McNary	Federal Smith-Lever	Federal Capper-Ketcham	State and college	County	Farmers' organizations, etc.
				Farmers' cooperative demonstrations	Other						
Alabama	$706,137.01	$283,827.50	$422,309.51	$30,972.80	----------	$1,980.00	$213,041.91	$37,832.79	$258,784.33	$147,725.92	$15,799.26
Arizona	143,764.44	67,509.94	76,254.50	11,488.62	----------	----------	33,920.44	22,100.88	49,357.60	26,819.90	77.00
Arkansas	577,901.90	255,806.17	322,095.73	29,042.54	$19,375.37	1,815.00	171,397.98	34,175.28	122,361.95	191,269.78	8,464.00
California	803,654.13	186,950.06	616,704.07	23,428.03	----------	1,980.00	130,921.71	30,620.32	410,274.17	206,429.90	----------
Colorado	277,428.70	113,955.90	163,472.80	22,040.55	3,499.92	----------	63,698.73	24,716.70	78,125.38	85,347.42	----------
Connecticut	290,868.04	95,319.74	195,548.30	10,953.56	----------	999.96	59,057.58	24,308.64	134,405.62	42,375.00	18,767.68
Delaware	58,811.96	46,531.85	12,280.11	4,251.74	----------	----------	21,288.65	20,991.46	12,280.11	----------	----------
Florida	363,348.23	124,048.82	239,299.41	20,460.83	----------	----------	77,646.71	25,941.28	79,736.62	159,562.79	----------
Georgia	801,700.73	327,353.38	474,347.35	35,186.89	----------	1,760.00	249,382.01	41,024.48	249,019.61	225,327.74	----------
Idaho	244,202.97	91,660.83	152,542.14	19,480.43	2,700.00	1,905.00	44,541.76	23,033.64	71,163.63	62,132.20	19,246.31
Illinois	1,049,059.87	292,768.99	756,290.88	11,477.23	----------	1,499.94	239,624.34	40,167.48	152,041.30	16,246.17	588,003.41
Indiana	622,976.05	215,303.45	407,672.60	11,190.46	----------	242.00	169,833.14	34,037.85	153,754.21	203,867.88	50,050.51
Iowa	1,068,632.65	228,370.57	840,262.08	12,791.40	----------	1,980.00	178,775.89	34,823.28	266,262.08	300,000.00	274,000.00
Kansas	701,962.79	179,914.62	522,048.17	11,626.82	----------	----------	137,122.84	31,164.96	153,497.96	277,610.56	90,939.65
Kentucky	555,887.92	274,242.19	281,645.73	30,066.38	----------	----------	206,883.86	37,291.95	142,241.30	137,230.58	2,173.85
Louisiana	496,950.25	215,079.68	281,870.57	30,829.21	11,838.47	1,896.04	139,226.59	31,289.37	97,990.00	181,647.69	2,232.88
Maine	196,240.03	104,246.46	91,993.57	17,979.10	----------	----------	61,724.50	24,542.86	56,948.10	25,776.97	9,268.50
Maryland	370,958.41	118,628.27	252,330.14	17,018.76	----------	1,914.00	74,068.49	25,627.02	175,221.44	66,712.00	10,396.70
Massachusetts	434,598.00	79,609.84	354,988.16	23,353.58	----------	1,980.00	32,316.26	21,960.00	100,058.22	254,929.94	----------
Michigan	739,672.01	213,286.71	526,385.30	9,920.13	----------	1,980.00	167,549.32	33,837.26	328,851.85	197,533.45	----------
Minnesota	532,674.87	205,218.32	327,456.55	12,905.20	----------	1,980.49	157,466.02	32,866.61	139,214.58	150,568.48	37,673.49
Mississippi	639,039.09	273,425.80	365,613.29	35,375.91	19,842.68	1,969.00	181,201.86	35,036.35	103,628.49	261,984.80	----------
Missouri	545,684.88	261,534.66	284,150.22	13,267.10	----------	----------	210,645.26	37,622.30	124,453.49	159,696.73	----------
Montana	318,372.14	104,763.11	213,609.03	24,755.95	5,189.96	----------	51,613.89	23,203.31	77,929.57	135,679.46	----------
Nebraska	388,212.24	157,555.34	230,656.90	13,806.00	4,738.74	1,980.00	108,389.25	28,641.35	98,887.02	118,627.11	13,142.77
Nevada	131,174.57	51,924.38	79,250.19	11,132.66	3,326.25	----------	16,862.72	20,602.75	41,779.71	36,771.73	698.75
New Hampshire	201,519.73	68,908.43	132,611.30	17,310.89	----------	1,980.00	28,033.64	21,583.90	72,500.00	60,111.30	----------
New Jersey	413,096.44	126,121.74	286,974.70	13,299.55	----------	1,911.25	84,378.43	26,532.51	104,450.00	178,868.97	3,655.73
New Mexico	183,114.36	85,106.49	98,007.87	19,625.66	----------	----------	42,616.21	22,864.62	32,616.21	64,675.93	715.73
New York	1,636,504.18	257,457.37	1,379,046.81	10,045.05	----------	1,980.00	208,062.91	37,369.41	614,674.78	719,977.77	44,394.26
North Carolina	705,111.27	311,902.23	393,209.04	31,433.59	----------	1,980.00	238,426.37	40,062.27	170,758.78	216,054.97	6,395.29
North Dakota	283,489.08	122,146.63	161,342.45	23,545.70	----------	1,500.00	71,683.39	25,417.54	61,324.34	96,734.93	3,283.18
Ohio	904,217.00	291,098.16	613,118.84	10,527.99	----------	1,749.96	239,917.62	38,902.59	365,534.44	247,584.40	----------
Oklahoma	608,597.09	236,833.24	371,763.85	28,005.42	----------	----------	174,389.77	34,438.05	159,482.86	212,280.99	----------
Oregon	348,025.47	104,525.25	243,500.22	22,602.93	4,800.00	----------	53,324.53	23,797.79	152,882.89	86,232.71	4,384.62
Pennsylvania	855,242.79	394,087.08	461,155.71	34.58	----------	1,500.00	353,641.38	38,911.12	309,887.71	151,268.00	----------
Rhode Island	57,291.70	35,663.99	21,627.71	6,843.34	----------	----------	10,977.07	17,843.58	4,661.90	13,178.00	3,787.81

98635—32——9

TABLE 25.—*Expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by sources of funds, and totals for 1915–1929*—Continued

State	Grand total	Total Federal funds	Total within the State	Funds from Federal sources					Funds from within State		
				U. S. Department of Agriculture		Federal Clarke-McNary	Federal Smith-Lever	Federal Capper-Ketcham	State and college	County	Farmers' organizations, etc.
				Farmers' cooperative demonstrations	Other						
South Carolina	$501,040.27	$227,279.26	$273,761.01	$30,350.70	----------	----------	$163,451.23	$33,477.33	$110,862.85	$162,898.16	----------
South Dakota	308,085.09	117,730.89	190,354.20	21,108.29	$2,400.00	----------	69,037.45	25,185.15	99,798.17	90,556.03	----------
Tennessee	630,960.26	279,047.55	351,912.71	32,210.77	7,500.00	$1,938.75	200,653.31	36,744.72	242,572.71	109,340.00	----------
Texas	1,161,594.08	461,718.27	699,875.81	51,310.68	----------	1,980.00	357,874.42	50,553.17	256,225.36	418,767.48	$24,882.97
Utah	135,471.85	81,673.58	53,798.27	16,398.96	5,954.94	1,235.36	35,816.87	22,267.45	48,032.12	4,308.95	1,457.20
Vermont	175,526.70	77,496.48	98,030.22	17,316.80	1,057.50	----------	36,770.93	22,351.25	33,200.00	53,535.67	11,294.55
Virginia	585,673.53	258,057.12	327,616.41	30,044.40	----------	1,599.96	190,554.95	35,857.81	208,190.68	109,447.39	9,978.34
Washington	258,534.09	121,388.99	137,145.10	23,203.80	----------	----------	77,121.21	21,063.98	29,375.43	100,993.12	6,776.55
West Virginia	462,754.82	179,978.12	282,776.70	16,508.67	----------	1,980.00	130,873.37	30,616.08	169,776.06	113,000.64	----------
Wisconsin	531,641.25	206,355.44	325,285.81	7,903.25	----------	1,792.50	163,204.06	33,455.63	158,164.83	167,120.98	----------
Wyoming	184,108.50	66,699.75	117,408.75	17,049.99	2,400.00	787.50	25,133.15	21,329.11	67,078.75	50,330.00	----------
Hawaii	70,662.55	50,662.55	20,000.00	662.55	----------	1,500.00	27,905.20	20,594.80	20,000.00	----------	----------
Porto Rico	3,888.89	1,941.50	1,947.39	----------	----------	1,941.50	----------	----------	1,947.39	----------	----------
Total, 1930	24,266,064.87	8,732,716.69	15,533,348.18	942,145.44	94,623.83	55,218.21	6,182,049.18	1,458,680.03	7,172,266.60	7,099,140.59	1,261,940.99
1929	22,870,026.76	8,412,090.30	14,457,936.46	952,935.37	356,671.43	51,688.37	6,159,777.48	891,017.65	6,533,642.12	6,729,270.85	1,195,023.49
1928	20,677,423.66	7,040,447.03	13,636,976.63	979,522.15	131,465.36	50,664.51	5,878,795.01	----------	6,210,848.55	6,232,223.56	1,193,904.52
1927	20,147,319.39	6,991,664.21	13,155,655.18	986,893.90	83,081.91	43,251.66	5,878,436.74	----------	5,855,177.85	6,104,682.36	1,195,794.97
1926	19,463,728.61	6,885,983.69	12,577,744.92	967,166.73	[1] 29,377.72	32,020.34	5,857,418.90	----------	5,766,165.92	5,667,425.56	1,144,153.44
1925	19,332,371.40	7,070,330.90	12,262,040.50	962,390.34	228,856.67	----------	5,879,083.89	----------	5,636,721.89	5,528,601.25	1,096,717.36
1924	19,082,025.04	7,085,826.81	11,996,198.23	991,900.82	234,320.98	----------	5,859,605.01	----------	5,239,420.54	5,612,556.56	1,144,221.13
1923	18,484,845.00	7,101,078.42	11,383,766.58	1,004,729.29	275,532.24	----------	5,820,816.89	----------	5,175,811.94	5,189,974.03	1,017,980.61
1922	17,181,751.64	6,727,153.86	10,454,597.78	1,007,263.48	209,540.93	----------	5,510,349.45	----------	4,715,382.34	4,685,415.80	1,053,799.64
1921	16,792,248.32	6,434,178.53	10,358,069.79	1,025,083.33	435,046.70	----------	4,974,048.50	----------	4,516,358.91	4,812,344.83	1,029,366.05
1920	14,658,079.92	5,891,456.71	8,766,623.21	1,021,091.39	406,020.96	----------	4,464,344.36	----------	3,875,220.27	3,961,663.71	929,739.23
1919	14,661,560.50	9,039,041.38	5,622,519.12	[2] 5,564,839.70	935,373.64	----------	2,538,828.04	----------	2,487,894.91	2,607,576.89	527,047.32
1918	11,302,764.75	6,475,755.54	4,827,009.21	[3] 3,900,406.30	507,282.95	----------	2,068,066.29	----------	2,194,421.72	2,078,709.49	553,878.00
1917	6,149,619.63	2,719,281.40	3,430,338.23	958,333.87	185,893.15	----------	1,575,054.38	----------	1,784,228.47	1,352,852.88	293,256.88
1916	4,864,180.94	2,143,485.66	2,720,695.28	900,389.92	165,172.01	----------	1,077,923.73	----------	1,370,218.08	1,042,478.35	307,998.85
1915	3,597,235.85	1,485,885.13	2,111,350.72	905,782.00	105,168.40	----------	474,934.73	----------	1,044,270.38	780,331.79	286,748.55

[1] Prior to 1926, included funds from various other bureaus. [2] Includes $4,598,243.13 emergency funds. [3] Includes $2,949,072.48 emergency funds.

TABLE 26.—*Total expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by items of expense, and totals for 1915–1929*

State	Total appropriation	Personal services—salaries and labor	Printing, binding, and cuts for publications	Supplies and materials	Communication service	Transportation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscellaneous
Alabama	$706,137.01	$575,639.18	$11,074.73	$24,007.97	$13,172.42	$2,098.55	$2,742.07	$17,803.71	$55,673.04	$3,925.34
Arizona	143,764.44	104,995.76	1,547.23	3,511.46	1,386.55	159.86	93.70	1,189.96	29,291.11	1,588.81
Arkansas	577,901.90	511,376.46	7,508.76	10,091.27	2,636.32	433.82	----------	5,568.23	35,602.48	4,684.56
California	803,654.13	609,852.00	----------	32,413.40	10,155.05	1,426.51	741.47	10,942.34	129,339.70	8,783.66
Colorado	277,428.70	190,315.04	3,550.09	11,753.61	4,748.59	765.41	60.15	1,613.42	58,181.92	6,440.47
Connecticut	290,868.04	187,309.15	6,869.40	11,858.28	8,468.66	473.08	109.36	5,259.51	53,485.95	17,034.65
Delaware	58,811.96	44,128.62	1,370.54	1,871.65	776.40	36.85	----------	850.20	9,728.71	48.99
Florida	363,348.23	320,565.76	5,238.69	7,171.25	699.62	299.96	170.43	1,568.08	27,171.61	462.83
Georgia	801,700.73	679,154.64	5,002.99	6,385.07	3,123.73	135.16	1,650.00	2,622.48	40,376.16	63,250.50
Idaho	244,202.97	164,930.80	1,847.35	7,645.17	4,271.56	757.72	191.19	1,137.51	62,146.93	1,274.74
Illinois	1,049,059.87	675,420.74	6,915.60	58,713.21	37,995.36	2,370.94	8,503.54	43,275.55	95,799.99	120,064.94
Indiana	622,976.05	491,812.25	2,669.00	20,810.22	7,323.35	848.87	545.82	3,195.54	82,922.40	12,848.60
Iowa	1,068,632.65	711,898.40	31,760.57	45,478.23	35,215.87	7,272.94	4,000.00	9,554.93	160,475.71	62,976.00
Kansas	701,962.79	490,652.97	995.39	34,325.86	17,650.24	1,851.65	1,053.00	30,276.64	75,757.33	49,399.71
Kentucky	555,887.92	423,189.79	5,346.18	6,784.30	1,760.71	460.80	3,600.00	1,344.01	113,113.62	288.51
Louisiana	496,950.25	447,218.65	2,881.48	7,371.91	1,405.68	409.44	7.01	4,629.47	32,285.23	741.38
Maine	196,240.03	135,582.64	1,343.22	8,674.04	4,340.71	397.48	1,701.69	3,753.35	39,742.08	704.82
Maryland	370,958.41	277,641.51	3,984.70	12,128.37	2,335.79	1,206.14	2,305.00	1,256.78	67,962.63	2,137.49
Massachusetts	434,598.00	253,076.79	2,480.84	6,257.45	3,215.09	446.48	----------	1,997.95	165,467.80	1,655.60
Michigan	739,672.01	605,240.27	10,728.45	18,609.44	4,195.97	440.96	----------	7,382.99	91,300.59	1,773.34
Minnesota	532,674.87	397,939.65	9,496.68	10,634.61	8,296.53	1,104.43	345.47	3,043.53	98,382.18	3,431.79
Mississippi	639,039.09	589,803.36	3,153.08	5,532.55	2,075.28	295.03	667.95	1,563.62	34,784.22	1,164.00
Missouri	545,684.88	393,350.60	11,023.52	25,437.95	8,593.26	913.69	305.39	5,601.89	95,605.86	4,852.72
Montana	318,372.14	234,730.58	2,286.82	4,061.34	1,619.70	329.49	963.94	1,169.65	61,519.62	11,691.00
Nebraska	388,212.24	292,252.71	2,064.77	15,967.89	7,993.71	812.04	325.73	8,770.56	54,429.69	5,595.14
Nevada	131,174.57	78,516.02	601.98	5,463.27	2,741.29	510.19	273.73	11,841.40	28,139.93	3,086.76
New Hampshire	201,519.73	139,317.98	3,329.41	7,819.83	2,755.94	686.70	700.00	3,278.13	40,337.47	3,294.27
New Jersey	413,096.44	307,582.31	6,928.19	20,187.55	5,201.64	351.70	822.77	14,345.79	52,908.67	4,767.82
New Mexico	183,114.36	123,004.31	2,108.86	4,540.82	2,398.17	634.56	600.00	2,559.93	46,629.17	638.54
New York	1,636,504.18	897,638.75	98,863.16	62,569.66	38,315.99	2,622.89	43,271.01	60,249.37	189,122.02	243,851.33
North Carolina	705,111.27	603,928.19	5,249.93	6,328.94	2,127.58	545.04	1,512.00	1,842.63	83,138.87	438.09
North Dakota	283,489.08	194,973.60	1,250.34	6,031.44	2,958.87	528.46	10,000.00	982.01	66,380.65	383.71
Ohio	904,217.00	697,469.76	17,478.02	22,609.25	9,259.64	856.13	54.26	8,388.30	143,006.72	5,094.92
Oklahoma	608,597.09	545,164.27	2,944.38	8,522.75	3,503.63	245.33	----------	4,109.52	43,876.08	231.13
Oregon	348,025.47	260,075.57	2,368.32	9,650.98	7,543.98	833.34	260.76	2,231.15	62,271.24	2,790.13
Pennsylvania	855,242.79	584,256.41	1,280.14	14,360.61	13,388.77	946.18	1,790.29	623.66	160,420.79	78,175.94
Rhode Island	57,291.70	38,475.26	273.50	2,858.19	309.96	57.01	----------	1,338.39	9,075.97	4,903.42
South Carolina	501,040.27	434,707.58	5,875.17	9,828.70	5,095.30	284.47	621.28	1,687.27	37,988.10	4,952.40
South Dakota	308,085.09	228,220.56	2,294.08	11,873.41	4,880.05	568.98	209.62	1,323.70	57,428.96	1,285.73
Tennessee	630,960.26	555,190.31	10,560.53	13,177.36	2,664.90	604.04	937.93	3,608.50	41,227.43	2,989.26
Texas	1,161,594.08	1,084,790.33	5,377.36	6,891.85	2,660.26	547.63	----------	1,626.92	59,582.66	117.07

TABLE 26.—*Total expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by items of expense, and totals for 1915–1929*—Continued

State	Total appropriation	Personal services—salaries and labor	Printing, binding, and cuts for publications	Supplies and materials	Communication service	Transportation of things	Heat, light, water, and power	Equipment	Travel expenses	Miscellaneous
Utah	$135,471.85	$111,998.04	$812.40	$2,658.40	$636.19	$146.92	----------	$1,231.57	$15,842.82	$2,145.51
Vermont	175,526.70	121,387.40	196.53	10,238.53	3,167.13	545.87	$695.43	2,096.79	31,211.73	5,987.29
Virginia	585,673.53	475,525.81	8,566.42	10,927.66	2,559.66	749.91	190.96	3,169.32	81,841.36	2,142.43
Washington	258,534.09	194,995.66	4,516.81	15,537.69	3,264.93	599.30	----------	3,005.99	35,565.69	1,048.02
West Virginia	462,754.82	378,111.73	5,077.00	29,068.65	5,412.06	886.01	2,505.15	6,333.88	35,015.49	344.85
Wisconsin	531,641.25	408,753.13	6,749.89	5,718.57	3,668.12	122.69	----------	----------	106,584.95	43.90
Wyoming	184,108.50	124,458.83	1,670.05	1,915.73	579.28	169.80	----------	342.86	54,778.40	193.55
Hawaii	70,662.55	52,379.21	2,234.79	2,150.37	465.79	111.07	----------	2,418.07	10,330.15	573.10
Porto Rico	3,888.89	3,349.50	42.50	75.46	----------	----------	----------	170.62	250.81	----------
Total, 1930	24,266,064.87	18,452,348.84	337,789.84	688,502.17	319,015.28	39,901.52	94,528.10	314,177.67	3,263,502.69	756,298.76
1929	22,870,026.76	17,035,051.12	342,182.63	640,033.93	297,314.16	40,943.53	88,198.90	384,080.53	3,451,340.68	590,881.28
1928	20,677,423.66	15,646,449.16	296,136.16	537,921.00	269,407.27	38,879.89	90,173.92	265,727.18	3,017,628.45	515,100.63
1927	20,147,319.39	15,106,156.34	308,999.13	547,306.70	278,925.49	34,512.35	86,308.32	235,941.92	3,045,401.81	503,767.33
1926	19,463,728.61	14,623,445.77	332,887.97	523,105.44	270,258.81	32,076.21	77,008.93	240,933.31	2,899,159.58	464,852.59
1925	19,332,371.40	14,376,987.22	317,825.82	515,783.58	255,634.14	33,419.12	85,051.59	279,476.73	3,000,956.41	467,236.79
1924	19,082,025.04	13,960,024.41	344,036.52	771,311.06	233,704.70	27,215.82	63,155.12	176,912.37	3,147,711.34	357,953.70
1923	18,484,845.00	13,669,718.39	336,906.94	477,957.00	194,642.98	[1] 25,567.34	54,900.21	148,038.03	3,031,252.99	545,861.12
1922	17,181,751.64	12,740,999.28	395,859.62	410,592.62	186,562.01	----------	47,197.29	129,259.56	2,765,227.90	506,053.36
1921	16,792,248.32	12,416,878.29	382,034.06	516,051.82	195,275.08	----------	48,735.14	140,983.36	2,873,523.01	218,767.56
1920	14,658,079.92	10,481,790.44	308,629.24	433,337.62	137,230.47	----------	36,471.25	134,720.51	2,807,798.73	318,101.66
1919	14,661,560.50	10,649,803.53	263,371.74	493,138.35	133,351.26	----------	19,574.36	185,407.12	2,735,151.37	181,762.77
1918	11,302,764.75	8,335,805.69	190,267.35	417,264.23	127,128.31	----------	18,246.60	216,040.27	1,830,764.70	167,247.60
1917	6,149,619.63	4,490,900.05	144,777.26	230,752.18	68,330.02	----------	6,214.88	87,223.27	1,023,405.63	98,016.34
1916	4,864,180.94	3,514,061.85	98,850.56	176,793.16	48,709.30	----------	4,842.21	95,182.98	849,259.37	76,481.51
1915	3,597,235.85	2,686,923.95	72,090.72	105,526.62	37,437.90	----------	9,614.79	63,084.01	603,432.74	19,125.12

[1] Prior to 1923, transportation of things was included in communication service.

TABLE 27.—*Expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by projects, and totals for 1915–1929*

State	Total	Administration	Printing and distribution of publications	County agent work	Home demonstration work	Boys' and girls' club work	Home-economics specialists	Extension schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy	Foods and nutrition	Child care and training
Ala	$706,137.01	$26,877.33	$11,742.67	$321,290.70	$164,799.09	$10,904.10		$4,538.29	$6,153.46	$16,438.58	$9,178.47		$5,068.23	$4,730.42	
Ariz	143,764.44	13,995.56	1,547.23	76,493.12	32,070.28	4,356.43			5,830.63	2,449.46	2,284.06		4,066.86		
Ark	577,901.90	18,841.42	7,508.76	293,298.69	196,883.04	6,383.91		5,712.87	4,302.11	5,712.21	5,063.90		4,554.86	7,004.64	
Calif	803,654.13	12,557.10		485,989.41	167,593.79	26,375.00		4,396.10		5,795.10	6,295.10	$5,695.10	5,396.10	6,195.10	
Colo	277,428.70	9,301.92	3,204.69	154,192.43	30,846.75	16,859.66			7,856.43	8,480.80	5,113.19		5,292.51	4,201.74	
Conn	290,868.04	18,686.29	5,363.26	66,600.49	44,583.69	60,704.65	$4,038.07	980.99	4,985.57	13,182.12	15,320.76		5,594.06	4,478.36	
Del	58,811.96	9,504.00	1,372.54	15,972.90	13,718.52	12,451.80				991.46				3,745.09	
Fla	363,348.23	7,316.38	5,209.19	176,154.49	134,545.93	5,819.79		2,923.57		11,915.47	5,125.83			8,512.15	
Ga	801,700.73	20,419.44	4,553.53	351,380.47	205,312.12	17,424.51			10,400.81	14,263.75	9,684.64	2,269.72	24,132.85	5,977.42	$3,866.38
Idaho	244,202.97	11,545.96	1,666.19	121,066.22	29,943.24	7,283.73		2,229.89	14,158.29	2,901.64	6,808.29		26,258.13		
Ill	1,049,059.87	27,490.12	7,355.52	753,455.83	126,203.46	43,502.57	3,405.98		7,398.79	4,531.35	10,376.24	2,729.85	12,724.07	3,782.82	3,360.45
Ind	622,976.05	27,563.22	2,669.00	348,857.94	26,413.42	72,366.10		46,532.45	14,753.79	10,242.28	14,545.42	8.01	11,593.93	6,257.28	
Iowa	1,068,632.65	62,991.87	13,098.57	655,418.75	54,649.69	41,383.39		3,260.98	16,569.48	9,314.14	36,539.17	6,890.24	17,661.34	11,120.04	473.87
Kans	701,962.79	25,136.42	5,951.82	400,313.15	103,170.48	25,717.72	3,607.18	31,673.99	9,142.61	8,588.84	9,435.66	3,820.25	14,255.36	7,316.31	
Ky	555,887.92	20,371.93	7,770.24	307,141.56	82,874.49	33,078.85		7,848.84	14,527.14	11,670.69	6,445.15	4,277.17	12,793.32	8,291.28	
La	496,950.25	30,945.42	2,881.48	249,922.45	138,377.74	12,002.11			3,874.40	9,307.58	4,997.27		4,053.77	3,009.20	
Me	196,240.03	10,317.75	1,299.10	70,552.07	51,356.08	26,647.14		680.74		3,572.22	3,815.86		2,227.73	3,121.09	
Md	370,958.41	17,784.17	3,934.55	136,553.31	101,586.04	8,924.42		4,235.96	4,744.28	6,813.54	9,342.24		5,463.32	3,062.05	
Mass	434,598.00	18,174.62	2,444.09	109,985.42	93,899.22	127,402.00		5,486.65	4,700.13	5,962.88	43.60		5,689.11	5,933.50	3,901.87
Mich	739,672.01	13,237.88	11,306.21	353,302.62	32,921.88	76,234.82		558.51	12,703.75	19,622.11	22,944.88	2,101.62	51,257.53	9,577.41	4,251.20
Minn	532,674.87	24,566.20	9,364.03	304,559.33	38,636.23	60,265.60			9,680.89	5,475.90	17,339.21	4,879.27	5,368.47	3,996.96	3,188.90
Miss	639,039.09	25,062.68	3,153.08	300,180.65	221,751.66	18,874.21			4,348.14	7,702.46	10,196.22			1,120.93	
Mo	545,684.88	14,546.14	13,710.39	311,880.51	61,841.76	20,801.01	4,487.38	750.59	14,808.14	10,490.01	11,238.32		22,281.43	3,846.40	
Mont	318,372.14	15,935.61	2,035.01	182,773.17	44,671.84	9,441.02		2,221.06	5,476.46	5,399.48	3,135.06	933.30	6,872.92	4,391.27	
Nebr	388,212.24	17,773.30	3,264.36	213,314.16	28,654.44	23,491.01			10,728.67	7,894.25	8,314.88		9,572.09	6,601.75	
Nev	131,174.57	11,740.25	592.98	73,410.79	40,910.35					1,048.05	1,972.15				
N. H	201,519.73	12,852.61	1,937.36	53,906.46	38,284.48	57,446.02		1,364.69		4,306.74	4,633.12		1,923.56	3,022.03	
N. J	413,096.44	16,991.01	6,014.52	145,534.74	90,041.08	60,406.06				12,766.05	12,354.05		5,617.56	5,495.67	4,942.84
N. Mex	183,114.36	13,516.76	2,099.87	99,298.18	44,972.55				5,286.27	2,487.58	2,487.58		5,831.32		
N. Y	1,636,504.18	235,452.16	98,863.16	503,714.28	264,408.79	153,784.97	13,532.03	49,332.51	50,898.43	29,468.95	6,804.49		28,974.76	9,698.20	10,013.92
N. C	705,111.27	19,128.50	6,449.93	367,633.52	200,665.62	5,185.43			8,154.11	7,952.06	16,308.23		20,581.31	3,612.51	
N. Dak	283,489.08	20,678.97	2,020.96	158,838.84	25,538.73	11,380.24			4,603.84	4,271.87	4,345.99	4,339.82	4,990.91	6,854.56	
Ohio	904,217.00	44,845.07	20,203.36	368,448.85	102,631.92	72,760.16	4,154.92	45,338.47	21,795.92	14,294.04	14,873.71		31,803.20	10,740.20	
Okla	608,597.09	29,547.14	2,915.38	289,054.78	182,943.41	14,753.91			4,923.23	9,051.80	20,944.92		4,778.38	4,100.12	
Oreg	348,025.47	34,203.88	1,259.40	181,745.53	22,903.18	48,494.06			4,749.82	4,572.32	4,991.63		6,230.37	3,441.00	
Pa	855,242.79	68,696.84	1,284.00	398,094.39	133,690.01	25,415.09			18,810.73	19,621.32	38,572.11		22,660.83	3,692.54	
R. I	57,291.70	3,975.75	328.39	15,121.30	13,374.76	15,022.49			2,702.17	4,232.26			737.79		
S. C	501,040.27	27,176.00	5,875.17	229,267.73	142,753.01	9,660.02	3,230.32		10,187.18	9,024.83	8,994.37		14,037.67	3,094.31	
S. Dak	308,085.09	13,447.67	5,827.82	150,030.21	47,008.83	32,956.63			784.50	3,755.50	4,809.36	5,510.73	6,016.71	9,056.93	
Tenn	630,960.26	37,261.61	10,840.53	323,375.76	158,404.41	11,261.81	4,167.33	6,062.14	16,944.11	9,158.49	11,024.54		5,055.01	4,106.46	

TABLE 27.—*Expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by projects, and totals for 1915–1929*—Continued

State	Total	Administration	Printing and distribution of publications	County agent work	Home demonstration work	Boys' and girls' club work	Home-economics specialists	Extension schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy	Foods and nutrition	Child care and training
Tex	$1,161,594.08	$32,052.35	$5,377.36	$647,706.10	$386,906.97	$50.00			$11,847.04	$5,580.81	$5,199.79		$5,737.41	$3,613.34	
Utah	135,471.85	16,633.98	812.40	66,233.91	18,942.04	3,947.03			2,806.06	1,980.07	1,111.48		4,069.93	3,119.41	
Vt	175,526.70	12,404.98	523.01	51,609.13	42,053.12	46,509.69				5,337.09	4,964.21		2,994.20		
Va	585,673.53	30,944.74	12,549.44	298,678.30	120,580.28	9,810.27			9,543.39	13,058.43	18,116.61	$4,342.02	7,038.17	4,769.76	
Wash	258,534.09	16,889.98	4,300.73	144,595.65	33,829.38	24,251.59			2,659.15	4,740.85	5.80		4,426.61	3,463.99	
W. Va	462,754.82	27,281.57	11,118.26	159,918.05	71,690.39	110,442.41			8,074.31	12,057.58	7,152.78		5,260.44		
Wis	531,641.25	16,699.68	12,706.69	271,345.33	23,536.74	45,977.44		$17,565.48	11,065.28	10,027.44	24,287.63		20,999.03	7,955.77	
Wyo	184,108.50	15,399.66	1,512.55	95,767.62	35,842.86	7,014.73			3,855.32	4,680.02	2,706.52		4,485.21	3,986.58	
Hawaii	70,662.55	10,333.57	2,254.88	23,966.96	25,706.04				4,801.10						
P. R	3,888.89														
Total:															
1930	24,266,064.87	1,269,097.46	350,073.66	11,877,946.25	4,494,923.83	1,535,225.60	$40,623.21	243,694.77	391,635.93	400,192.47	450,245.19	47,797.10	476,428.37	220,087.59	$33,999.43
1929	22,870,026.76	1,168,404.66	351,405.12	11,279,965.61	4,120,553.14	1,400,350.13	47,831.56	237,137.84	388,537.55	366,053.25	417,105.39	33,525.56	451,252.19	209,793.47	16,640.92
1928	20,677,423.66	1,104,828.92	281,366.44	10,428,075.46	3,473,385.97	1,213,207.16	88,648.02	229,514.13	409,316.08	348,698.64	356,780.70	36,688.66	437,965.97	194,941.97	
1927	20,147,319.39	1,064,771.80	367,432.37	10,417,472.81	3,230,811.22	1,095,659.16	89,233.61	244,949.38	417,323.02	325,016.76	337,172.79	30,799.85	403,985.27	187,264.08	
1926	19,463,728.61	1,084,480.88	426,746.12	10,110,852.06	3,142,681.57	1,069,465.82	94,996.20	258,241.06	345,716.18	313,069.02	333,597.75	30,424.76	399,490.81	187,897.17	
1925	19,332,371.40	1,132,491.32	393,722.62	9,936,517.45	2,998,862.25	1,059,714.37	203,565.07	261,868.23	368,775.08	281,094.93	383,405.85	35,842.58	413,403.27	153,450.45	
1924	19,082,025.04	1,021,783.43	389,321.11	9,999,271.48	2,831,269.37	991,490.45	575,250.46	246,408.66	355,517.40	284,732.27	395,267.26	36,761.09	417,858.06		
1923	18,484,845.00	1,226,809.21	332,987.35	9,625,817.43	2,790,419.11	991,179.78	502,968.18	254,388.90	338,874.66	270,060.32	369,724.59	54,798.23	388,279.58		
1922	17,181,751.64	1,159,074.59	408,983.22	8,946,340.45	2,400,789.74	1,054,388.85	470,378.09	219,213.29	334,436.03	241,417.41	289,773.00	40,492.07	350,605.55		
1921	16,792,248.32	1,147,756.66	382,034.06	8,911,965.32	2,388,473.21	923,982.19	300,146.47	243,483.54	300,270.51	209,454.02	323,182.77	36,532.87	281,547.94		
1920	14,658,079.92	995,051.57	308,629.24	7,665,170.77	2,177,024.52	883,615.86	332,415.38	239,453.36	231,141.57	151,161.93	276,917.62	63,200.89	218,019.26		
1919	14,661,560.50	930,658.24	263,616.98	7,124,500.90	2,889,210.50	921,621.38		221,906.97	380,168.56	199,441.89	289,756.98	71,678.74	170,534.71		
1918	11,302,764.75	754,175.86	207,478.99	5,604,962.72	2,226,227.97	669,666.18		237,364.78	309,270.72	70,402.84	332,852.55	31,777.11	153,211.24		
1917	6,149,619.63	512,891.54	137,647.87	3,058,640.94	741,679.89	319,556.91		321,079.76	162,063.74	59,498.54	208,966.83	44,215.50	105,529.87		
1916	4,864,180.94	445,243.67	99,779.68	2,411,539.81	519,866.99	231,227.16		322,726.80	131,937.90	47,328.49	172,557.69	21,936.02	77,859.05		
1915	3,498,815.35	295,308.48	71,597.65	1,902,230.51	319,822.50	162,448.27		299,175.64	42,448.08	19,475.14	106,098.08	4,563.64	20,912.81		

State	Clothing	Home management	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Rodent pests	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Information	Miscellaneous specialists
Alabama	$4,568.81	$4,426.75	$8,864.17		$4,125.27		$3,960.00	$12,045.72			$13,193.67	$530.91	$71,682.75	$1,017.62
Arizona												670.81		
Arkansas	1,585.78	3,444.83	3,000.01				3,973.89				4,443.07		8,187.91	
California	5,162.01	5,095.40	11,295.10				5,386.37	11,496.10	$10,244.99		12,496.06	6,295.10		9,895.10
Colorado	3,207.12	4,721.37	3,464.19						6,195.11		4,617.34		7,217.20	2,656.25
Connecticut	4,538.29	4,703.00	10,756.58		2,362.58		2,401.70	2,678.52	6,503.35		7,325.71		4,850.00	230.00
Delaware				$265.48	790.17									
Florida			959.05	959.06	959.06								2,948.26	
Georgia	3,969 51	3,462.26	15,111.83				6,854.42	9,862.08	3,673.91		8,937.19	3,122.51	13,771.38	63,250.00
Idaho	4,533.12		4,794.17		2,105.07	$4,723.66	3,900.26		285.11					
Illinois	3,686.53	6,573.91	8,388.99				2,999.88	4,702.03	10,240.53	$1,395.77	966.06		3,789.12	
Indiana	2,522.04	6,425.72	9,108.67	8,198.04	114.78		508.25	2,647.74	8,909.93				2,738.04	
Iowa	11,208.71	20,757.08	18,498.84	4,440.54	13,633.43		4,005.43	3,836.35	10,185.14	3,257.14	34,733.16	3,890.13	10,815.17	
Kansas	8,783.32	3,466.16	6,440.69	4,249.04	5,335.92	181.14		10,932.43	4,488.33	402.77	3,657.43		5,895.77	
Kentucky	7,328.54		9,557.52					5,986.96	4,951.32		6,433.50		4,539.42	
Louisiana	4,162.12		7,534.83		6,333.39		3,792.08	3,394.91		3,578.32	2,899.74		5,883.44	
Maine	3,318.45	3,163.57	2,227.72				3,211.01		5,796.87				4,932.63	
Maryland	3,455.46		12,471.76	10,075.25	20,244.84		3,909.00			3,970.00	9,081.93		5,306.29	
Massachusetts	5,145.62	4,504.61	16,607.89	2,011.52			4,026.44	27.72	5,889.43		5,514.67	2,162.06	5,084.95	
Michigan	7,494.24	14,194.58	27,199.57	2,012.51	2,322.51		5,283.81	27,844.04	5,942.46		16,298.64		21,059.23	
Minnesota	7,411.02	3,813.15	107.14	4,428.72	1,674.25		4,645 30		9,570.21	3,300.00	2,522.97		7,881.12	
Mississippi		7,336.21	9,088.78				4,688.00	5,337.55		5,227.40	11,778.67		3,191.75	
Missouri	10,997.37	7,490.78	4,520.43					6,786.74	5,206.74	5,371.43	5,090.33		9,538.98	
Montana	4,077.43	3,548.42	5,045.58	1,200.00	2,213.30			497.31	12,017.03			269.68	4,039.19	2,178.00
Nebraska	5,361.42	6,843.11	4,310.72		1,965.39		4,760.74	11,755.84	7,951.83	5,374.25	1,490.14		8,789.89	
Nevada													1,500.00	
New Hampshire	3,089.38	3,939.73	4,224.05				4,323.73		4,655.77				1,610.00	
New Jersey	3,856.37	5,376.96	15,980.65				5,894.22	3,676.85	7,969.06				10,178.75	
New Mexico			1,238.78						1,518.03				4,377.44	
New York	11,662.68	17,520.81	29,339.25	22,370.88	11,910.64		7,899.98	16,404.84	23,554.53	9,079.14			27,323.78	4,500.00
North Carolina	3,653.59	3,599.52	8,458.97	3,675.26	8,379.56		5,084.71	5,672.72			1,000.00		8,441.75	1,473.97
North Dakota	11,667.67	3,637.31					3,000.00	3,455.68	7,247.80		1,629.85		4,986.04	
Ohio	12,225.89	8,833.20	31,515.70	7,819 92	13,697.91		3,741.49	13,891.00	24,816.82	5,510.17	13,218.42		17,056.66	
Oklahoma	3,601.68	3,170.49	8,187.68		9,440.65			6,664.95	3,179.29		3,547.33		7,791.95	
Oregon			5,243.13			2,610.82		40.50	1,556.31		15,478.18		10,505.34	
Pennsylvania	18,616.51		24,538.59	17,017.53	21,337.60		10,875.11		11,133.89	5,311.40	10,622.79		4,000.00	1,251.51
Rhode Island			1,796.79											
South Carolina			7,966.91	1,591.03	7,527.44						13,476.41		7,177.87	
South Dakota	3,478.06		3,000.00		2,167.42			1,892.47	5,370.23		9,440.95		3,531.07	
Tennessee	1,907.07	1,907.06	5,302.42				4,399.03		10,296.50		5,285.98		4,200.00	

TABLE 27.—*Expenditures of funds from all sources for cooperative agricultural extension work in States, Hawaii, and Porto Rico for the year ended June 30, 1930, by projects, and totals for 1915–1929*—Continued

State	Clothing	Home management	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Rodent pests	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Information	Miscellaneous specialists
Texas	$4,608.12	$8,691.98	$5,822.35		$5,435.11		$3,960.00	$5,661.22		$9,330.07			$14,014.06	
Utah	3,326.58	3,355.98	811.11				2,470.72							$5,851.15
Vermont		3,766.18	898.95				38.10		4,178.04				250.00	
Virginia	3,847.86	2,492.38	15,009.97				4,158.31	11,497.06	3,570.22	5,512.17	$6,994.15		3,160.00	
Washington		4,171.59	3,191.78						1,652.70		1,265.16		2,312.58	6,776.55
West Virginia			22,187.21	$295.67			4,624.10		1,681.16	11,240.51			1,400.00	8,330.38
Wisconsin	10,522.84	7,339.54	10,722.12	7,280.49			7,820.03	4,581.13	5,698.03		10,160.56		5,350.00	
Wyoming	4,826.17		2,143.66			$90.00	1,575.00		222.60					
Hawaii							3,600.00							
Porto Rico							3,888.89							
Total, 1930	213,407.38	191,773.64	406,934.30	97,890.94	144,076.29	7,605.62	145,660.00	193,270.46	236,353.27	77,860.54	243,600.06	$16,941.20	351,309.78	107,410.53
1929	207,428.86	159,947.24	403,038.25	97,505.16	138,811.77	11,120.31	132,198.86	224,054.27	201,569.58	65,241.47	230,684.48	18,747.26	358,461.40	132,661.46
1928	201,927.94	111,397.12	351,738.32	98,896.25	127,880.58	7,238.75	127,658.44	171,075.62	177,215.46	64,264.25	216,306.98	22,998.56	233,881.30	161,525.97
1927	205,573.74	108,726.04	357,276.69	93,007.15	121,702.18	7,406.84	115,836.77	158,365.17	178,545.66	69,182.30	172,233.35	37,105.50	154,675.85	155,790.03
1926	195,243.18	80,396.21	339,565.75	101,183.48	112,838.27	6,358.05	82,537.27	159,051.02	161,629.62	65,695.89	160,364.10	41,539.07	54,239.87	105,427.43
1925	183,231.83	69,871.68	317,171.49	101,697.38	104,265.73	144,785.47	30,918.78	155,621.08	169,453.91	64,422.16	169,131.52	22,299.87	45,968.20	130,818.83
1924			315,353.61	95,242.00	106,905.73	143,737.33	18,928.99	167,832.95	156,455.94	50,843.31	177,435.75	24,888.34	13,070.96	86,399.09
1923			316,237.49	84,167.35	111,120.36	176,222.78	14,187.56	177,600.66	163,830.70	37,049.51	171,271.52	18,521.48		68,328.25
1922			272,175.98	106,683.99	103,562.22	154,067.62	13,201.60	128,178.32	152,623.81	21,318.83	204,185.86	10,311.31		99,549.81
1921			244,885.75	246,405.00	98,490.86	158,167.12	10,936.54	124,742.98	146,080.43	22,518.19	259,041.53	20,078.60		12,071.76
1920			190,600.55	196,723.24	88,679.73	129,141.12	10,694.57	125,161.36	116,381.31	30,025.75	179,620.88	23,245.03		26,004.41
1919			163,788.79	286,997.69	112,474.45	151,373.85	9,499.45	97,295.29	125,614.03	49,575.14	163,927.62	10,529.41		27,388.93
1918			125,604.52	61,591.37	100,783.02	58,670.91	5,099.82	64,517.11	102,302.00	42,152.51	104,268.49	13,159.98		27,224.06
1917			84,069.57	32,596.15	14,826.22	16,435.68	9,558.50	50,600.78	102,033.20	46,194.46	50,237.47	12,482.49		58,813.72
1916			79,745.13	14,014.12	8,510.74		3,638.84	36,680.32	88,469.26	39,447.36	20,493.57	12,650.06		78,528.28
1915			29,927.89	4,923.17	3,940.00		3,965.44	13,041.60	51,531.27	5,060.34	2,298.60	14,019.21		126,027.03

U. S. GOVERNMENT PRINTING OFFICE: 1932

LIBRARY
BUREAU OF
AGRICULTURAL ECONOMICS
U. S. DEPARTMENT OF AGRICULTURE